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Original Articles

A REPORT OF SIX CASES OF INTESTINAL OBSTRUCTION IN THE REGION OF THE CECUM.*

By W. Gunn, M.D., Clinton, Ont.

CASE I.

Intestinal obstruction caused by adhesions between the caput cecum and an abscess sac in the broad ligament, complicated by uterine fibroids, a pyosalpinx and a cystic ovary.

Specimen Removed.—Uterus with multiple fibroids, one of which protruded from the os as a polypus, a cystic ovary, a Fallopian tube much thickened and full of pus, a pus sac containing about eight ounces of pus, removed from between the layers of broad ligament, appendix being still attached, the walls of the sac from one-fourth to one-third inch in thickness in places.

Operation, June, 1906.—Result, recovery. Under care of Dr. McCrimmon, Kincardine.

History.—Miss M. (aged 34).—For several years had symptoms of uterine tumor. For about six weeks previous to operation, there were added to the above the physical and local signs and symptoms of pelvic inflammation of the right side. Dr. McCrimmon made an almost exact diagnosis of the trouble early in the disease and advised immediate operation. This was refused till obstruction of the bowels became complete.

Operation.—A long incision through the right rectus muscle, appendix amputated and stump inverted. The caput cecum which was thickened was carefully separated from the broad ligament and the wall of an abscess which it contained. It was also separated

* Read at the County of Elgin Medical Association, Nov. 3rd, 1911.

from the appendix which had been a factor in causing intestinal obstruction. The distal end of the appendix was thus left firmly imbedded in the pus wall. A partially buried cystic ovary was separated and it, together with the pus tube and uterus, were removed. Fresh pads were put in position. The line of cleavage being found between the abscess and the broad ligament, the wall of the former was separated with fingers and gauze. As the sac wall was thin at the part to which the appendix was still attached, with the most careful dissection a slight leak of pus was unavoidable.

The adjustment of pelvic peritoneum, toilet of the pelvis, an abdomino-vaginal drain, and through and through sutures of silk worm gut to close the wound completed the operation.

Remarks.—Appendicitis is not an uncommon cause of intestinal obstruction, but this case, by reason of complications, probably merits a place in our list. The pus tube and cystic ovary might well be caused from an infected uterus, but the abscess in the broad ligament was evidently secondary to a diseased appendix.

As a rule, when practicable, it is safer to drain a pelvic abscess per vaginam and to postpone further operations that may be necessary. The virulency of an abdominal or pelvic abscess diminishes in proportion to its age or as the peritoneum becomes immune to the infection. As a rule a pelvic or abdominal abscess is virulent in proportion to the effort the omentum has made by means of adhesions to guard the general peritoneal cavity from the infection. Suspect an abscess, however small or sweet smelling, if the omentum regards it as dangerous. A bad odor does not indicate a virulent abscess. The reverse is often the case.

In removing inflammatory tumors of the pelvis, it is well to guard against cutting or ligating the broad ligament transversely far out. To do so is seldom necessary. It is often associated with troublesome bleeding, and may endanger bowel, mesentery or ureter that may have happened to be in the mass.

The abdominal vaginal drain and through and through sutures are often indicated in pelvic pus cases.

To have separated the appendix early from the abscess wall would have added very much to the danger of infection in this case.

CASE II.

Intestinal obstruction associated with displaced right kidney, nephritis, septic pyelitis and paranephritis, a large inflammatory mass involving the ascending colon.

Separation of kidney, decapsulation, nephrotomy, nephropexy drainage.

Result.—Recovery. Operation October, 1905. Patient under care of Dr. McDiarmid of Hensall.

History.—Mrs S. (about 35 years of age).—Family history somewhat tubercular. For several years suffered from severe headaches and bladder symptoms. For some time before operation the headaches were intense and there were symptoms bordering on convulsions. Temp. 100 to 104. There was vomiting and obstinate constipation. Before operation the obstruction was almost complete. A tumor could be felt just above the cecum. It was painful and tender to pressure, fixed and somewhat tympanitic on percussion. The urine contained albumin, pus, blood, bladder and kidney epithelium, casts of different kinds, uric acid and oxalate of lime. Urination was frequent and painful. At times there were symptoms of nephritic colic. The findings justified the provisional diagnosis of displaced kidney nephritis, a septic pyelitis and cystitis.

Operation.—A retroperitoneal incision revealed a displaced kidney, enlarged and firmly fixed. The kidney was separated from its surroundings with considerable difficulty. A dense inflammatory mass was now observed in front of the kidney, apparently involving the ascending colon. No attempt was made to interfere with it and the peritoneal cavity was not opened. The kidney was decapsulated and split, exposing the pelvis, which contained pus, a bloody grumous substance and some small calculi. The kidney was fixed by its capsule in the normal position, a drain inserted, and a drain and some packing put below it. The wound healed in about four weeks and the patient has had excellent health ever since.

Remarks.—In this case, the findings in the urine confirmed the diagnosis. Apart from such, the mistake of opening the abdomen through the peritoneum might have been made.

The cystitis was probably kept up by a septic pyelitis and a debilitated system, for the condition improved soon after operation.

The bowels became regular, either from relief of kidney pressure or absorption of the inflammatory product, or both combined.

Jas. McKenzie of London, England, says that all the symptoms of acute abdominal obstruction may be caused by a stone in the ureter, owing to reflex spasm of the anal sphincters, causing retention of gas, abdominal distension, etc.

CASE III.

Intestinal obstruction from an extensive inflammatory product about the lower end of the ascending colon, which looked like a malignant growth, causing complete obstruction of the bowels, five weeks after an operation for a small cystic ovary, and the removal of catarrhal appendix.

Lateral anastomosis between cecum and colon.

Result.—Recovery. Operation October, 1908. Patient under care of Dr. McNaughton, Brussels.

History.—Miss F. (age 32).—Good family history. Had left ovary removed by a Toronto surgeon several years ago. An ovarian cyst as large as a navel orange and a catarrhal appendix were removed July 10th, 1908, at the Clinton Hospital. The operations were of a simple nature and at the time nothing abnormal was observed in the ascending colon. Everything seemed to go well for two or three weeks, when obstinate constipation developed. At the end of the fifth week, there was complete obstruction. The pains were very severe.

Operation.—The abdomen was opened, at midnight, Dr. Clark, now of Pontypool, and Dr. Shaw of Clinton, assisting. Everything seemed to be normal at the sites of former operations, but there was an enormous mass resembling a cancer involving the first six or eight inches of the ascending colon. After a difficult dissection, the colon was liberated and found to be very much thickened and indurated, and its calibre entirely obliterated. As the colon was already mobilized, it was not very difficult to approximate and unite the cecum laterally to the colon, beyond the seat of disease. This was done with Connell suture. The patient made a good recovery, and has had very fair health since then, over three years ago.

Remarks.—I am aware that it is contrary to the best teaching to make a short circuit of the bowel, such as was done in this instance, but as the parts came together without much difficulty, I did not see the need for a longer circuit. Besides owing to the weakened state of the patient, the operation was intended as a temporary expedient, a resection later on being anticipated.

This inflammatory growth with almost certainty developed within five weeks. The etiology I make no attempt to explain. I recall several instances where chronic inflammatory growths were confusing at the time of operation. One of these, a case, under the care of Dr. Elliott of Lucknow, where an appendectomy was done on a man 68 years of age. The appendix contained a calculus, but no pus. A very large mass resembling a carcinoma involved the region of the cecum, which at the time was considered inoperable, but the patient is well six years after. A patient of Dr. Burrows of Seaforth, had a gastro-enterostomy for pyloric obstruction. There was a tumor in the first part of the duodenum, as large as a small hen's egg, and some involvement of adjacent glands. At the time of operation we considered the tumor to be cancerous. It is over six years since the operation, and the patient is quite well, having gained fifty

pounds in flesh. The growth was evidently inflammatory, the result of an ulcer of the duodenum.

CASE IV.

Intestinal obstruction caused by twist of pedicle, left ovary (fibro-cystic) pressing on the cecum.

Specimen Removed.—A fibro-cystic ovary larger than a normal kidney, containing blood, left Fallopian tube containing a half ounce of blood clot—a cyst in the broad ligament containing about twelve ounces of a sero-saneous fluid. The mass gangrenous.

Result.—Recovery. Operation, May, 1907. Patient under care of Dr. Campbell, Zurich.

History.—Mrs. P. (age 40).—Mother of five children. Had fairly good health till present illness.

On May 2nd, 1907, felt a very sudden, severe pain on the left side of the lower abdomen. The pain was colicky in character, micturition became frequent, and with it a scalding sensation.

When Dr. Campbell saw the patient shortly after, she was in a state of collapse. For the present, the symptoms were relieved by a hypodermic of morphia and strychnine. About two weeks later, when driving to Zurich, there was a second attack. The symptoms were of the same nature as the previous ones, but more severe—the shock more pronounced. Partial relief was again obtained by morphine and strychnine. On May 25th, two days later, there were severe pains in the region of the appendix. The abdomen was much distended and tympanitic, vomiting frequent, no gas or feces passed the lower bowel. Soon after the second attack Dr. Campbell detected a tumor, tender and dull to percussion, over the cecum, and advised an immediate operation, which was refused.

On May 26th, the fourth day from the onset, when consent to operation was granted, the pulse was 130, temperature about normal, vomiting persistent, and intestinal obstruction was complete, the bowels were much distended, and the gas could be seen to accumulate and recede at the point of obstruction.

Operation.—The abdomen was opened through the right rectus. A gangrenous mass presented, which, at first sight, gave the impression of a gangrenous bowel. On lifting the tumor, its pedicle could be traced to the left side of the uterus. The diagnosis being made, the mass was separated from the uterus, the pelvis cleansed, wound closed and a drain inserted which was left for 24 hours. A speedy and permanent recovery followed.

Remarks.—This form of intestinal obstruction is sufficiently rare

to be included in this list. It will be observed that the mass that pressed on the cecum came from the left side of the uterus.

The frequent and painful micturitions, which were marked symptoms, especially in the first attack, were no doubt due to traction on the ureter or pressure on the bladder, or to both combined.

As the pain radiated to the left kidney, the symptoms altogether simulated renal colic, which Dr. Campbell at first thought it might be.

The suddenness of the onset, and the absence of fever were strongly suggestive of a twisted pedicle, but the cyst in the broad ligament, which could be felt behind the uterus, helped to obscure the diagnosis, which in this case, as in some others, was postponed till the abdomen was opened.

CASE V.

Intestinal obstruction from pressure of a distended gall bladder on the cecum and ascending colon. Gall bladder descended to the brim of the pelvis and contained pus, mucus, bile and about one hundred small gall stones. Cholecystotomy.

Result.—Recovery. Operation December 20th, 1908. Patient under care of Dr. Campbell of Zurich.

History.—Mrs. W. (aged 30 years).—The mother of two children, and with a good family history.

For some years had been treated by different physicians for indigestion. On Dec. 17th, or three days prior to operation, patient complained of an intense pain just below the sternum, which came on suddenly. Dr. Campbell, who saw her shortly after, found her in a state of collapse. The pain was very severe and vomiting persistent. There was a slight jaundice and the urine contained some bile.

Dr. Campbell detected a tumor on the right upper quadrant on the second day, but the rigidity and distension were so great on the third day (the day I first saw her) that nothing of the nature of a tumor could be outlined. There was marked dullness over the whole of the right abdomen, however. The temperature never rose above 100, the pulse was fast, and the respiration quick and "catching."

Operation.—The abdomen was opened by a long vertical incision through the rectus muscle. A grayish mass that looked at first glance like a greatly distended colon presented which descended to Poupart's ligament. The diagnosis of distended gall bladder having been made, the tumor was carefully raised out of the wound and the abdominal cavity protected with pads. The gall bladder was

emptied of its contents, fastened in the upper part of the wound, and drained in the usual manner. Several stones were removed from the cystic duct, but none were found in the common duct.

The patient gained rapidly in health and strength soon after the operation, but for some reason the wound at times discharged bile for three months. The patient became pregnant about this time and the fistula healed completely.

Remarks.—Pressure from distended gall bladder is not a common cause of intestinal obstruction.

Early operation was imperative in this case, for, apart from the obstructive symptoms, rupture of the gall bladder apparently could not have been long delayed.

It was nigh impossible from physical signs to make anything like a positive diagnosis on the third day on account of the rigidity and abdominal distension. Dr. Campbell had made a tentative diagnosis of gall bladder distension from the early marked pain and tenderness in the region of the gall bladder, the finding of a tumor on the second day, the jaundice, and the history of indigestion with gastrodynia. The enormous distension in so short a time would seem to be a feature of the case.

CASE VI.

Intestinal obstruction from cancer of the cecum, which was mistaken for a movable kidney. Resection—lateral anastomosis. Specimen, six inches of the ascending colon, six inches of the ilium, the cecum, appendix and adjacent glands. The cecum almost a solid mass, with a calibre that would hardly admit a lead pencil.

Result.—Recovery. Operation August, 1910. Patient under the care of Dr. Redmond, of Wingham.

History.—Miss G. (age 27). Mother died from cancer of the uterus at about the age of 45—otherwise, family history unimportant.

Personal History.—For about a year before operation the patient was anemic, lost flesh, and suffered from constipation. Two weeks before operation, Dr. Redmond was asked to see Miss G. on account of pains in the right abdomen. These pains were colicky in character, and there was an elevation of temperature of 1 to 3 degrees, lasting several days. The bowels were moved with difficulty and vomiting was a pronounced symptom. There was frequent micturition and bladder irritability, although the urine showed nothing specially pathological.

Dr. Redmond detected a tumor in the region of the cecum. From the feel of the tumor, and the fact that it could be moved to

the normal position of the kidney, and other symptoms, Dr. Redmond and Dr. McDonald were disposed to regard the condition as one of displaced kidney, and thought nephropexy advisable.

Operation.—A short incision having been made, retroperitoneal examination showed the kidney to be normal in size and position. The wound was now extended to the inner side of the spine of the ilium to near Poupart's ligament. The peritoneum was opened and the diagnosis of tumor of the ilium made. This opening, resembling the lumbo-ilio-inguinal incision for exposing the ureter, gave an admirable working space. The outer leaf of the mesentery was divided, the mass raised out of the wound, and turned on its inner leaf, the vessels were ligated and cut, and pads placed for protection. The colon and ilium were doubly clamped six inches from the cecum. The parts so isolated, with the adjacent glands, were removed. The ends of the colon and ilium were inverted and the parts united laterally. The openings were two and a half inches in length, and as near the ends as possible. The union was made antiperistaltiely, and with the Connell suture. A cigarette drain was inserted in the lower part and the wound was united in layers. Union was somewhat tedious on account of stitch abscesses; otherwise recovery was uneventful.

The patient reports that she feels as well as she ever did.

Remarks.—This case is interesting from a diagnostic standpoint. The size, shape and mobility of the tumor certainly resembled a displaced kidney. The colic pains simulated the pains caused by an obstructed ureter. The age of the patient was somewhat misleading.

While constipation was very obstinate, there was not total obstruction, although the calibre of the gut was so reduced.

The findings in the urine were against a displaced and affected kidney, for a kidney giving a rise of temperature should show something pathological in the urine.

The incision employed was unusual for such operation, but it gave a good working space.

The last six inches of the ilium has the same blood and lymph supply as the cecum and ascending colon, and should always be removed with them for cancer. W. Mayo removes all of the ascending colon with a cancerous cecum and also the last six inches of the ilium.

In uniting the ends of the bowel laterally, it makes little difference in result whether these are joined in an isoperistaltic or an antiperistaltic manner. Ease of coaptation is the main thing to be considered.

It is almost a surprise how easily the cecum and ascending colon are mobilized by first cutting the outer leaf, and hemorrhage is comparatively trifling when the mesenteric vessels are ligated at the beginning of the operation. The glands follow the course of the iliocolic vessels which supply this part of the bowel. The ureter must be carefully guarded. A Murphy button should not be used in this part of the bowel.

In conclusion, I would offer the following propositions or suggestions:—

It would seem as if inflammatory products in some subjects have a tendency to become excessive as compared with others, or else the infection is of such a character that it tends to such result. This apparent freak that an inflammatory process takes at times is not at all rare, and the condition has caused confusion many times in diagnosis, treatment and prognosis for to the naked eye these tumors are not distinguishable from cancer.

I consulted Dr. Primrose of Toronto regarding Case No. 3, where the ascending colon became totally occluded, and he informed me that he was preparing a paper on the very subject for the Ontario Medical Association, held at Niagara. Dr. Primrose, in his instructive paper, entitled "Inflammatory Tumors Producing Intestinal Obstruction," cites four cases which had recently come under his care. In concluding the paper, he remarks as follows:— "My object in recording these cases is to emphasize the fact that when such inflammatory tumors exist, the operative interference should be of the simplest variety, such as the creation of a fecal fistula or the resection of a damaged portion of the bowel." In case (1) of our list, it is probable that the large abscess in the broad ligament, if left for some time longer, would have emptied into the cecum and the remaining cavity would become filled with granulation tissue, which, with the thickened sac wall, would result in a large inflammatory tumor. It would seem that a pus sac becoming filled with granulation tissue is the history of some, at least, of those tumors, but others have their origin in an ulceration of the bowel, acting as a septic focus in producing inflammatory growths. When the septic focus is removed, absorption of these growths follows, as a rule.

Purgatives and delay are constantly bringing surgery into disrepute.

Purgatives should never be given in acute abdominal troubles till organic obstruction can be excluded with certainty.

A case in which there is sudden severe abdominal pains with vomiting, and neither gas nor feces passing from the bowel, is

surgical from the start. It is especially so if attended with shock. Fecal impaction alone rarely if ever produces all the symptoms of acute organic obstruction, neither does the administration of opiates. They will not cause stercoraceous vomiting.

The long rectal tube hardly ever passes above the rectum. An examining finger will find the tube coiled back upon itself in the bowel.

The question is often asked by the friends of the patient, "Would the patient have lived if operation had been done early?" The surgeon has either to sidetrack the truth, which he often does, to save his confrère, or he assumes the responsibility of performing a needless operation.

It follows that in cases of intestinal obstruction the best interests of all concerned are served by an early operation before local inflammation, or general infection begins.

Too many people imagine that a surgeon's motives are not wholly disinterested, hence for obvious reasons it is the physician's duty and privilege to advise and insist upon early operation when such is indicated.

In deaths associated with acute intestinal obstruction, the exploratory incision or operation in competent hands can seldom be regarded as a factor bearing on the result.

PNEUMONIA.

James R. Mitchell (*Medical Record*) says that the logical treatment of pneumonia is rest, support and calcium. He favors calcium chloride as the ideal heart tonic in pneumonia. Every aspect of pneumonia bears testimony to the value of calcium. The pneumococcus extracts calcium from the medium in which it grows, that it extracts calcium from the human culture medium, that convulsions are caused by this calcium poverty, that gray hepatization is impossible without the presence of calcium, and that edema of the lungs and collapse of the heart occur only when the coagulation time of the blood is delayed. He considers that cold air treatment and cold sponge baths are harmful and brutal, and that warm air is just as fresh as cold air.

AGNODICE.*

By J. S. Sprague, M.D., Perth, Ont.

Long ages since when plunged in thickest night of ignorance and error lay the world, save where, in one small part called Greece, there blazed the noonday sun of learning and of art, destined to shed its beams unto all time, in the Athenian tribunal hall, summoned for judgment, stood Agnodice.

A form of noble majesty and strength, such as the genius of that ancient's clime has left in priceless legacy of stone, outrivalling in stately, calm repose the sculptured column at whose side it stood; serene those features, cast in mould superb, yet fine cut as a carven cameo.

A mouth whose generous curves bespoke a soul large, brave, yet tender; prone to sympathy. Eyes like a crystal pool, yet in their depths lurked, baffling idle gaze, dark mysteries, all fathomless as in the deep green sea.

Then spake the justice: "You are summoned here, a charge most grave to meet; for it is claimed the noble art of medicine you've used to cover other base, designing arts against the peace of the domestic hearth, corrupting Athens' maids and matrons pure; that feigning ailments of the flesh to heal, that which tenfold more precious is, the health of the immortal soul, you undermined. Here in the court do your accusers stand, Athenian citizens of high repute, prepared to prove conclusively their charge. A stranger, Athens gave you learning, fame. How ill do you requite her if this crime be fastened on you, which by Grecian law must be atoned by death! Now, prisoner, the court of Athens will permit your plea."

The form beside the column raised its head, down bent the while the judge's speech was made, and in a voice whose full, rich, swelling tones were like unto an organ's, came these words: "O righteous judge, and all assembled court, I face you with the truth upon my lips. As to the grievous crime upon me charged, a strange dilemma I'm compelled to meet. I do avow the practice of deceit on my Athenian fellow-citizens. But that I have seduced their wives and maids is fully false, a piece of calumny which in three simple words I can refute; yet these of fell import, for Athens counts as infamy th' offence I thus avow, no less than that where-

* These are a few selections from Chapter XXIX. of Dr. James S. Sprague's proposed blication, *Ideals in Medicine and Religio Medicorum.*

with I am wrongfully charged: in either case my life the forfeit pays. Should I keep silence I might win release, for of my guilt there can be brought no proof; yet foul, unmerited dishonor's stain on Athen's blameless matrons there would rest. I cannot purchase life at such a price. Know then, O citizens, that I who stand before you, charged with this vile crime, am but a woman, and my name Agnodice."

Throughout the court at this confession strange arose a tumult that not soon was quelled, while motionless and calm its subject stood, as though the matter nothing her concerned.

"I marvel not that ye should stand amazed to hear the revelation of my sex. Well have I kept my secret, since not one of the wise men of Athens did suspect that underneath the learned doctor's garb there beat a mere weak, craven, woman's heart. And now that I am doomed, I pray the court for leniency, while I do relate the story of my life, to warn rash youth of Athens, lest they follow in my course."

Consent was granted, and Agnodice continued her recital: "As a child I saw my brothers at their games and books, wherein they told me I could have no part, because forsooth, I was a woman-child! That to my sex forever was denied the boon of knowledge, for the gods ordained that woman by her nature was but fit for household tasks and bearing of the young. I answered naught, but in my heart was born faint stirring of rebellion 'gainst my fate. I mused—'How strange that these same mighty gods have placed such aspirations in my breast that do of right belong to men alone!'

"And so apace this knowledge hunger grew until it gnawed into my very soul.

"And when at length I could no longer brook the torment, did I make a last resolve to brave the wrath alike of gods and men, attain the wisdom I so coveted at any cost. I left my native heath, and well disguised in masculine array, journeyed to Athens, where I boldly knocked upon her doors of learning; the result you know full well. For I bore off the palm from all my masculine competitors, although I was a woman. Strange, indeed, if a woman's brain is by the gods decreed of poorer quality than is your own, that I should outstrip all the noble youth of Athens! Mark you then, if this my act has been displeasing to the eternal gods, as in the eyes of men, would they have shown such favor to the maid Agnodice? Would they have placed these laurels on my brow?

"Such wrongs the mighty gods could never do—endow a woman

with the attributes that to the sex superior belong, and then deny her opportunity to exercise these faculties divine. And so I reasoned, 'twas a blunder made, for which the gods were not responsible. Dame Nature 'twas who in erratic mood had linked a man's mind to a woman's form. And none suspected, none in all these years, the secret of my sex. Oh, strange indeed, the ways of gods are—not like those of men—that by mere change of garb a woman is transformed into the semblance of a man, and that great inner difference concealed!

"The gods were good; they granted me success. My fame spread far and wide, and from all parts came the afflicted, seeking for relief. But of all patients did my heart the most incline unto my suffering womankind. For I too was a woman, and my heart went out to these, my sisters, in their woe. For they have trials that ye reck not of, oh, men of Athens, following the path of glory, wealth and honor in the world, unmindful of the dull and thankless lot that falls to them, your mothers and your wives, makers and moulders of the race, that bear the burdens of yourselves and of your sins before birth, and until your dying hour.

"So to the mothers and wives of Athens I gave my services and sympathy. I sorrowed in their sorrow, and rejoiced when they were glad. In pity for their pain, I wrought appliances for their relief; devices crude which science may some day perfect, forgetting that the hand and brain that first did fashion them were those but of a simple woman, called Agnodice.

"Yea, I confess I loved them, and from them won love and gratitude. And such as these are the base arts ye charge that I have used, O men of Athens, whom your vices make prone to suspicion, these the dealings foul that I have had with your chaste wives and maids. Such are the soundless depths of infamy to which have slunk these slandered Grecian dames. Ah, now, accusers, does the flush of shame not tinge your brows to hear the simple truth?

O men of Athens, if you could but know what finer forces dwell within the frames of your submissive, gentle womankind! These are your warriors, doing battle brave with armed hosts of sin and suffering! With smiles that hide the heartbreak giving up the sons they've borne to fight their country's foes. Mightier in battles fought in blood to win a kingdom, and more glorious victories, these conflicts of the soul from which there come patience, obedience and self-sacrifice! These are your statesmen, teaching to your sons—the little lads that cluster round their knees—the love of Greece and reverence for her law. These are your sages who in

silence learn a truer wisdom of the heart and soul, the flower of their life's experience! What do ye with them? Shut them up to spin?

"O men of Athens, hearken to my plea! Do as you will with me, but give to them a larger freedom, standing at your side, as equals, and no longer slaves and toys! Give all their faculties development; no longer bind their souls in iron bands of custom, forged from superstition's flame. Then from a fairer Greece shall spring a race greater and nobler than ye yet have seen.

"I would not be so impious as to say the gods have erred. Ye have not read aright, O men of Greece, their mystical decrees. Lo, here I make to you a prophecy: if in your blindness ye shall still ignore, and your descendants, this mysterious force, this potent energy—the feminine—in the affairs of life, 'twill not be lost. Naught in the universe is ever lost! but, beaten back upon itself, pent up, mute, motionless, and stifled in the breasts of womanhood, a hundred thousand fold it will multiply until long ages hence, bursting asunder its fast prison bars, in one tremendous, irresistible outflow of power, 'twill o'erwhelm the world, triumphs achieve that man has never dreamed!

"Thus then will the eternal righteous law be vindicated; so the mighty gods avenge the fatal ignorance of man!

"My tale is done. Do with me as ye will!"

She ceased, and for an instant silence fell upon the multitude. Then through the court was heard a murmurous undertone that swelled in volume, rising ever like the tide, until a very ocean it became of sound tempestuous, upon whose wave, above the mighty roar, these words came borne:

"Well hath she done and spoken. Set her free! Let all revere the brave Agnodice!"—Selina Seixas Solomons, in *Arena*.

ANNOTATIONS, SCHOLIA, AND CONSIDERATIONS.

Agnodice.—The name of the earliest midwife mentioned among the Greeks. She was a native of Athens, where it was forbidden by law for a woman or a slave to study medicine. According to Hyginus, however, it would appear that Agnodice disguised herself in men's clothes, and so contrived to attend the lectures of Hierophilus, devoting herself chiefly to the study of midwifery and the diseases of women. Afterwards, when she began practice, being very successful in these branches of the profession, she excited the jealousy of several of the other practitioners, by whom she was summoned before the Areopagus and accused of corrupting the morals of her patients. Upon her refuting the charge by making

known her sex, she was immediately accused of having violated the existing law, which second danger she escaped through the intervention of the wives of the chief persons of Athens, whom she had attended, who came forward in her behalf and succeeded at last in getting the obnoxious law abolished.—Smith's "Dictionary of Greek and Roman Biography and Mythology."

They accused her before the Areopagus of corrupt practices and conduct, "quod diceren eum glabrum esse, et corruptorum earum, et illas simulare imbecilliatem."—Hyg., Fab. XXIV.

The Greeks of this historic and heroic period (400—300 B.C.) had their wives to watch their children and the household gods, and for their lighter hours the blond-haired hetaerae, attractive and beautiful. A query naturally arises, and it is this: Were the fountains of her youth—(of Agnodice)—dried up, was the nimble spirit of her arteries and of her nerves unstrung? Was this fair maid of Athens "blue eyed, and fair of face, but waning fast into the sere of virginal decay?" as Henley would ask. Was she—this Doctress Agnodice—(who gave draught, counsel, diagnosis, exhortation) as Henley also says:

> "Frank-faced frank-eyed, frank-hearted; always bright
> And always punctual—morning, noon and night;
> Bland as a Jesuit, sober as a hymn;
> Humorous and yet without a touch of whim;
> Gentle and amiable, and full of fight?"—

Were the golden gleams of her early dreams—the dreams of wealth and husband—were they the things of the long ago?

Did Dr. Herophilus—the dean, (whom Cicero, Plutarch and Pliny praise), the most learned in anatomy in Greece, yes, did this learned dean say, as William would have said or thought, "Lady, you are the cruellest she alive, if you will lead such graces to the grave and leave the world no copy."

Did the learned Dean say:

> "Her soft white hair adorns
> Her withered brows in quaint straight curls like horns,
> And all about her clings an old sweet smell,
> Prim in her gown and quaker-like her shawl."
>
> . . . . . .

Was she

> . . . "a wee old maid that sweeps the Bridegroom's way,
> Strong in a cheerful trust that never fails"?

While recalling to memory "The Wedding of Schon McClean," by Buchanan, the following few lines came to my ink-horn Was her voice "like the whistlings of birds, the humming of bees, like the sough of the south winds in the trees; or the singing of angels, the playing of shawns; like ocean itself with its calms and its storms; like a thousand laverocks singing in tune; or like countless corncraiks under the moon; or a mermaid's harp, or kelpie singing? for whom no epithalamic song was sung? Was this Agnodice—Doctress Agnodice—whose eyes were filled with "dark mysteries," yet with "eyes like a crystal pool" and "baffling idle gaze"?—yes, was she a bone-puncher and rib-adjusting osteopath or a spinal column wrencher—chiropractic—an olympic god scientist, or a regular of the Aeselepiadae? Did the Areopagus allow bone-punchers, spinal column adjusters, defamers of the gods—called scientists, full authority to practice the noble art of medicine—and yet arrest the licentiate Agnodice? Do we not in this civilized age allow pernicious and soul and body-destroying cults existence, and yet, when one of our own licentiates errs, the whole medical Areopagus silences him by fines or imprisonment?

. . . . . .

"Women who study side by side with men," says Dr. Montravale Greene, a professor of obstetrics and clinical gynecology, Harvard University, "are injuring themselves in the present and weakening their powers for the future, and the whole theory of co-education is doomed to fall of its own weight."

Men in medicine often wonder why the opposite sex should wish to become "women in medicine." It is true it is an attractive study, but the life-work is by no means ideal. Woman, with her high and finer sentiments, her spontaneous goodness and affinity, could find a far better calling or profession and a much better life even in the church. One fact is, there never was, is not now, or ever will be, a demand for "women in medicine," and one fact also is that "the pursuit of 'careers' by women is fatal to domestic happiness," and consequently ruinous to the commonwealth.

If the late distinguished poet-laureate of England could but behold the glimpses of the moon and the blood-red spots on the sun, he would recall his words:

> "That light its rays shall cast
> From portals of the past,
> A lady with the lamp shall stand
> In the great history of the land,"

for, instead of "the lady with the lamp," he would in London see *the* lady of his dreams with beer bottles and clubs belaboring the

custodians of the peace—even policemen—and in civilized and Christianized America—women as jurors, even as barristers, mountain climbers, jungle huntresses, doctors and police mistresses or rather police madams. "As soon as a man or a people or a literature or a period becomes feminine in type it declines in prestige and in power," says Amiel, "and as soon as a woman leaves that state of subordination in which her natural merits have full play we see a speedy increase in her natural faults. Complete equality with man makes her contentious. A position of supremacy makes her tyrannical. For a long time the best solution will be found in honoring her and at the same time in controlling her."

My apology for this presentation of *Agnodice* is this, that but few, a very few of the most scholarly, however well perfected their studies in the humanities, are able and gifted to "wrestle, wrangle, wriggle and writhe" with words and metre and produce such sentences of flawless and inimitable periods of pleasingly and unerringly controlled rhythm and music in its appeals, and its hortatory apophthegms—and not least, to ascribe to Agnodice the beginning of many evils with which the world is now contending and with which and against which the gods or man have no control.

To the writer of *Agnodice* the following classical words do not refer:

"Nam neque chorda sonum reddit quem vult, manus, et mens,
Poscentique gravem persaepe remittit acutum:
Nec semper feriet quodcumque minabitur arcus."

"Alas, but few can touch the magic string, and noisy fame is proud to win them; Alas for those who never sing, and die with all the music in them," said Dr. Oliver Wendell Holmes.

"A wife is half the man, his truest friend;
Source of his virtue, wealth, the root:
Whence springs the line of his posterity.
A wife of gentle speech, a docile dove,
Sufficient wealth, unbroken health—a friend,
And learning that subserves some useful end—
These are a living man's six greatest blessings."
—Mahabharota, B.C. 200.

As Milton has it: "He for God only, and she for God in him," would save a dying age and bring again those halcyon days "when knighthood was in flower," when men were men and the gods reverenced. *Nec tecum vivere possum, nec sine te.*

NEPHRECTOMY FOR CHRONIC PYELO-NEPHRITIS PROBABLY OF HEMATOGENOUS ORIGIN.

By J. P. Kennedy, M.D.
Surgeon to the Wingham General Hospital.

Infection of the kidney and its pelvis comes about through the blood stream or by direct extension from below from the bladder and genitals up through the ureter. We were formerly taught that all renal suppuration came from below, but it is now apparent that this is not the case; and when one considers the excretory function of the kidney, one perceives how inevitably it is subject to damage in connection with all sorts of diseases. Pathogenic bacteria lodge in the kidney in the course of measles, smallpox, scarlet fever, typhoid fever and tuberculosis; the colon bacillus and pus-producing cocci all may pass through it.

Acute unilateral hematogenous infection of the kidney may be mechanical by actual infected tissue carried to the kidney or emboli of bacteria themselves may be lodged in the kidney parenchyma. Women are more commonly affected than men. The infection may be rapid and fatal, or, after a rapid onset the symptoms may subside and the course become chronic. When it becomes chronic it was formerly described under the old fashioned caption "surgical kidney."

In the case of "surgical kidney" which I am about to report, the infection in all probability was carried to the kidney substance by the blood stream and was not of the ascending type which is most common, and for this reason I thought the case worth reporting.

Mrs. McG., widow, presented herself for examination on May 13, 1909.

Family History.—Father died at 68 from pneumonia. Mother died at 68 from heart trouble. Brothers, three living and well. Sisters, none. Husband died at 44 years of age from cancer of the stomach. No history of tuberculosis in the family. Mother's sister died with cancer of the uterus at 70 years. No history of kidney or mental disease in the family.

Previous Illnesses.—Measles when a child.

Menstrual History.—Normal in every way.

Marital History.—No children, no miscarriages.

Present Illness.—Sixteen years ago last August and September the patient had typhoid fever, was six weeks in bed. Never properly regained her strength after the attack. Thirteen years ago she began to have frequency of urination. She had no pain, but simply the desire to urinate frequently night and day. About seven years ago she took a sudden severe pain in the right side, she vomited and the pain was so severe that she had to go to bed. This attack lasted about two hours. For a time these attacks of pain came on about every four to six weeks. About three years ago the attacks got further apart, coming on about every eight or ten weeks and with them she had chills and fever. These attacks continued up to the time she came to consult me. A year before coming to me she consulted a surgeon in Detroit who said that her urinary trouble was due to a retro-displaced uterus and advised an operation. This she consented to and the surgeon performed an internal shortening of the round ligaments. This he followed by local treatments of the bladder from December to the following April. The operation and treatments were followed by practically no improvement. When she consulted me I made a cystoscopic examination of the bladder, but could find no local condition to account for her symptoms.

Urinalysis at this time was as follows:

Color.—Pale amber, cloudy.

Reaction.—Slightly acid.

Sp. gr.—1020.

Alb.—Slight trace.

Sug.—Negative.

Microscopical.—Many pus cells, much squamous epithelium and a few amorphous urates. Repeated examination of the urine showed practically the same condition. It was always found loaded with pus. In the meantime I put her on urotropine diuretics and washed out the bladder twice a week, although from the first I was convinced that the primary trouble was higher up, probably in the right kidney.

This treatment producing no amelioration in her symptoms, I referred her to Dr. B. R. Schenck of Detroit for ureteral catheterization. Dr. Schenck's report was as follows:—

" Mrs. McG. came in the last of last week, and I have seen her on four different days. Cultures from the bladder urine show what is apparently the colon bacillus in pure culture. I have not yet traced it through all of the media, but feel sure that it will prove to be B. coli communis. The urine coming from the right kidney is heavily loaded with pus, and I think that the source of the trouble is in the pelvis of the kidney on that side. One day I thought that

I could make out an enlarged kidney on the right, but later I was not sure whether it is enlarged or simply moveable and prolapsed. Whether it is a case of pyelitis or one of pyelonephrosis, I am inclined to the view that it is simply pyelitis."

Later Dr. Schenck wrote me that the organism obtained from the bladder urine turned out to be, as expected, the colon bacillus.

I accordingly advised nephrotomy and drainage. It was not, however, until April, 1910, that the patient would consent to operation. At the Wingham General Hospital, on April 16th, I opened into the loin and brought up the kidney. As far as I could judge from the macroscopic appearance, the kidney, although small, appeared healthy on the surface. I split it along Brodel's line down to the pelvis. The hemorrhage was quite free, but was controlled with hot sponges; I then inserted drainage and sewed up. The wound healed in about four weeks, and for several months my patient enjoyed comparative freedom from her distressing urinary symptoms. During the winter of 1910 and 1911, however, the frequency became as bad as ever, so bad indeed that her rest at night was seriously disturbed by frequent urination. The patient began to fail in flesh and general health. She occasionally had attacks of pain in the right side over the region of the kidney, chills, followed by some elevation of temperature. In the spring of 1911 I advised her to have the kidney removed. To this she consented, and, on April 29th last, in the Wingham General Hospital, I again opened in the loin, brought up the kidney and removed it.

The macroscopic appearance of the kidney was as follows:—The kidney was small and contracted, and showed evidence of traumatic injury, the whole being surrounded by a thick, fibrous capsule. On palpation it was hard and firm to the touch. Along the external and posterior surface could be felt a hard cord running from the inferior to superior pole of the organ. On section there was increased resistance of the cutting instrument. The cut surface shows inferiorly that the kidney substance proper is almost wholly displaced by connective tissues, while superiorly a small amount of secreting substance about the size of a walnut but paler than normal could be found, which could be detached from its capsule. The microscopic examination of the specimen was made by Professor McKenzie of Chicago, and is as follows:—

"Each section examined presented a thick, connective tissue capsule, to the outer side of which was attached remnants of kidney tissue, in which could be recognized a few atrophic Malpighian bodies, as well as a number of tubules which showed marked degeneration of their epithelial lining. The contents of the connective tissue

capsule, was simply a network of connective tissue strands, holding in their meshes, masses of pus in which no bacteria were demonstrable. Owing to the complete disappearance of all normal kidney tissue, it is safe to assume that the organ did not functionate for some time before removal."

Diagnosis—Pyelonephritis.

The operation was followed by practically no shock, and Mrs. McG. made an uninterrupted recovery. I have been surprised in a number of instances at the small amount of shock following nephrectomies. Dr. W. J. Mayo says there is very little risk about nephrectomy, even when the other kidney is somewhat diseased. The remaining kidney soon hypertrophies and takes on the function of both kidneys. Mrs. McG. is now in perfect health, the urine is normal, her distressing symptoms have entirely disappeared, and, in fact, she says she never felt so well in her life.

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*SUCCESS IN CATARACT OPERATIONS

By W. M. Brown, M.D., L.R.C.P. London, Eng., Neustadt, Ont.

Mr. President and Gentlemen,—The object in offering this paper is to induce discussion, elicit opinions, voice mistakes, because it is upon these latter circumstances that we can learn and from bitter experience, dearly bought, know how, in future, failure may be averted.

I would suggest that at the next meeting of this section, a symposium upon the errors, accidents and complications of cataract extraction be given. It could not fail to be instructive.

Genius is said to be "ability to take infinite pains." If this be so every good operator must be a genius, for there are a multiplicity of minute details, the observance of which means success to the operator.

The operation for cataract requires more nerve, skill, judgment, delicate manipulation, painstaking care before and painstaking care after, than any other done upon the human body. A cut a $\frac{1}{4}$ of an inch too little, or too much, here means failure or disaster, while in other regions of the body has little bearing upon the result. The chief aim of the operator is good vision, let the cosmetic results be what they may. When your hair becomes grey and you are a past master in the art of section making, then strive for optical appearances. Technique and manipulation may be faultless and

* Read at Ontario Medical Association, 1911.

results poor—on the other hand a badly done operation is often followed by excellent vision.

We have all been on the "anxious seat" in our first extractions. The hopes and fears that filled our hearts. The anxious friends who crowded around and who looked on sceptically and gave but doubtful countenance to the proceeding. It tries your heart and soul, and when you have successfully passed through it you know you have been through the "fire" and that you have sounded every depth of surgical terror. It means so much to you, as well as to the patient.

There are a few conditions which contra-indicate operation. Dacryocystitis is one of them. The surgeon certainly takes great risk in extracting in its presence even with the canaliculus tied off. Cough should be cured—a bark cough, after section, tends to reopen the wound. Oezena is another contra-indication. Our procedure is as follows: Eyebrows and eyelashes having been clipped off, sterile towels applied to the head and chest and in a good light

1. Wash with soap and water.
2. Wash with sulphuric ether
3. Wash with bichloride (1-4,000).
4. Evert the lids, and by undine wash thoroughly with hot bichloride (1-4,000).
5. Add 1 drop eserine (1% solution) half an hour before operation.
6. Repeat this 15 minutes later.
7. Three drops cocaine (4%) at intervals of 2 minutes before operation—begin 10 minutes before section.
8. Boil instruments and plunge
9. Into alcohol—then
10. Into 1% carbolic solution.
11. Lint wrung out of 1-4,000 bichloride.
12. Withdraw the knife slowly.

Nothing should be rushed. Plenty of time should be taken. Operators at Moorefields frequently take two minutes in making the section alone.

The knife should be extremely sharp, with a tapering point, and used only once before resharpening. A good speculum is still a desideratum—one which is quickly and easily removable and applies closely to the temple, and is not in the way of the knife. In deeply sunken eyes a lid retractor held by an assistant is best. In grasping the conjunctiva below, a half turn with the fixation forceps anchors the eye more securely.

Half the battle lies in making a good section—if this is properly done, everything else is easy. Therefore have conditions such that you are at ease, in a sitting position, with the patient's head lying not more than 12 inches below the operator's eyes, with perfect control over and at ease of your hand. This cannot be secured with the patient lying in bed and the operator leaning over him with every muscle tense. An ordinary table brings the patient too high, but a table about 26 inches in height fulfils these conditions for the average operator. Most sections are made too small. The accompanying illustrations, from a noted work by a noted operator, shows how the counter-puncture should *not* be done. The latter is much higher than the former—the lens will not present and the wound must be enlarged by scissors or Graefe knife. Enter the knife slightly above the mid horizontal line of the cornea and make the counter-puncture at a *corresponding* point on the inner side, *i.e.,* section, almost one-half the circumference of the cornea. Hold the knife like a pen, lying upon the index and middle fingers and secured above by the thumb. The ulnar side of the hand should rest upon the patient's head, and the section made with a finger and not with a hand movement. In this way the point is absolutely controlled. The section should, if possible, be done in two movements—from point to heel and vice versa—cutting out very slowly. Sawing movements cause pain and imperfect co-aptation of the lips of the wound.

During the days following the operation, if the patient does not complain, rest assured he is doing well—" no news is good news " in eye surgery.

A watchful attendant should be on every case, day and night, for the first ten days. I well remember how this was brought home to me upon one of my first extractions. I had operated upon an old German lady of 76. She was doting, but her friends, who brought her to me, said nothing of the matter. On dressing the eye on the third day everything was well and I remarked we would soon have her sitting up. The next morning, on returning from a distant call, I found my brave German lady up, dressed, downstairs, and sitting out in the backyard, facing a blazing July sun, on one of the hottest and brightest days of a hot summer. I had difficulty in restraining myself from slapping her. Her excuse was, " Der Dokter hat gestern gesagt Ich kann bald aufstehen !! " I rushed her back to bed, and inside of a couple of hours iritis, with intense pain, set in, and for the next thirty-six hours I spent my time in making hot applications to eye, giving opiates, &c. Finally the eye quieted down, and the night following it, whilst watching her, I fell

asleep in the hall outside the room. On awakening from a nap, I noticed a disarray in the room, and on enquiry found she had been out of bed, to use the chamber. On stooping to open the washstand door, she had struck the eyebrow, immediately above the operated eye, a heavy blow against the corner of the washstand. It was a miracle the ball was not emptied of its contents. I then took strong measures and tied her to the bed with ropes, winding them around bed and body. She was a constant worry until her friends removed her home. Strange to say, after going through all this her vision was 20/50 !!

I have had one death from cataract extraction. It was in an aged Mennonite, in the Canadian Northwest. It occurs rarely and is preceded by delirium, and when this occurs, instant action is necessary, if life is to be saved. All bandages should be cast off and the patient gotten up and out of doors at once. Free exposure to light and air are imperative. The operative results will be nil but life may be saved.

Cocaine should not be used too freely. One of my earlier cases had a very patent canaliculus. The cocaine ran down the tear duct to the throat, affected the palate and caused retching, reopening the wound, with infection and suppuration, and the result was a shrunken and useless eyeball. I received some of my gray hairs in quieting down that eye.

Long-range doctoring of cataract cases is false economy and bad practice. To remove a cataract and leave the care of the eye to an inexperienced man is risky, and often ends in disaster.

Whooping Cough.

Mehnert (*Jah. fur Kinder.*) contributes from Cape Colony an article on "Intercurrent Vaccination Aborts Whooping Cough in Infants." He states it is remarkable the way this disease disappears after an intercurrent vaccination. The effect of the vaccination does not seem to be modified by the presence of the pertussis. So convinced is Mehnert of its efficacy that he suggests the advisability of postponing vaccination of infants so as to utilize its dual action in case of an epidemic of the disease.

SYNOPSIS OF THE REPORT OF THE REGISTRAR-GENERAL OF ONTARIO, 1910

What the frivolous call "The hatches, matches and dispatches record" for the Province of Ontario for 1910, which has been compiled by the Registrar-General's Department, contains some interesting figures with regard to the vital statistics of the Province. The Report is in the hands of the printers, and will not be ready for the public for some weeks yet.

During the year there were 55,871 births, 24,036 marriages and 33,539 deaths, or 24.9, 10.7 and 14 per 1,000 of the estimated population respectively for the county municipalities of the Province (including cities and towns).

For the 18 cities the figures are: Births, 18,767, or 32.2 per 1,000; marriages, 11,793, or 20.2 per 1,000; and deaths, 12,303, or 21.1 per 1,000.

The towns of 5,000 population and over are 15 in number, and their statistics are as follows: Births, 2,918, ratio 21.6; marriages, 1,405, ratio 10.4; deaths, 1,109, ratio 14.7.

Of the 33,539 deaths there were 706 from typhoid fever, 2,287 from tuberculosis in all forms, as against 2,380 in 1909. Cancer was the cause of death in 1,077 cases; 222 died from diabetes, 327 from anemia, 355 meningitis, 923 apoplexy, 2,240 organic heart trouble, 464 broncho-pneumonia, 1,458 pneumonia.

Diarrhea among infants under two years of age was fatal in 1,374 cases, while 2,455 died when under four months of age, owing to weakness from birth or ignorance on the part of the mothers with regard to the care of children.

In 284 cases women lost their lives in child-birth.

Of the 1,626 deaths from affections produced by external causes, 91 persons took their lives by various methods, hanging being the favorite; 26.3 per cent. of this number selecting this means of exit from a weary world. Ninety-five persons were poisoned accidentally; 43 were burned to death; 112 died from burns received; 33 died from gas poisoning; 266 were drowned; 64 shot accidentally; 209 killed by motor cars, landslides, steam and electric railways, etc.; 13 were frozen to death; 8 died from effects of heat—sunstroke; 11 killed by lightning; 18 by electric shock; 17 homocides took place, and the balance, 645, died from various accidental causes.

Old age was the cause of death of 3,429 persons; 2,207 were still-born.

With regard to mortality among infants, it is found that among those under five years of age 6,649 died under one year of age; 917, one year old; 424, two years old; 321, three years old; and 247, four years old.

March was the favorite month for births, there being 5,033 in that month. Of the children born throughout the year, 28,664 were males and 27,207 were females. There were 370 pairs of twins, 264 boys and 376 girls. Triplets surprised the happy father in five cases, 9 boys and 6 girls.

June continues to hold favor with the bride. Of the 24,036 marriages, 3,555 were celebrated in the happy month, September and December following in the order named with 2,653 and 2,304 respectively.

There are two periods in a woman's life when friends are vastly interested in her age; when she marries and when she dies.

The Report goes rather deeply into some of these figures, and while all the secrets are not disclosed, yet there is some interesting information in its pages.

With regard to the age at which persons marry, it is of interest to learn that, so far as Ontario is concerned, men do not marry, to any great extent, at a later date than women, although it is popularly thought otherwise. Last year 8,168 grooms, or about one-third of the total number of men, married between the ages of 20 and 24, while 47 per cent., or nearly one-half, the women who entered the bonds of matrimony were between those ages. With both sexes the next greater number were in the 25-29 group, and then come the 30-34 for the grooms and 15-19 for the brides.

Under the age of 20, 453 men were married, one taking a bride in the 30-34 group, one selecting a lady whose age comes in the 35-39 class; one married a lady of the discreet age of 70, while two grooms showed a predilection for the same maturity of their brides.

Fifteen women between the ages of 15 and 19 married men between 40-44; two became brides of men between 45 and 49; one married a man over 55; two, men over 60, and one a man over 70, as did also a lady of 25-29.

Cupid drives his bolt athwart denomination and conventions. Just at the present time the question of mixed marriages is holding a certain amount of public attention, but many of the good people who discuss the matter of persons of different faiths marrying will be surprised to learn to what an extent such marriages are contracted in Ontario. It appears that in one year alone Methodists married Roman Catholics, Jews married Gentiles, while in many cases May wedded December.

Out of the total of 7,351 Roman Catholics, no less than 1,509 married out of their denomination. Of the grooms 665 married non-Catholic brides, and 844 professed Catholic girls became brides of non-Catholic grooms. Of these marriages, the larger number were between Catholics and Anglicans; then came Methodists, Presbyterians, Baptists, Lutherans, in the order named, but, rather strangely, no marriage between a Roman Catholic and a member of the Salvation Army is recorded, yet two married Jewesses, and five brides threw in their fate with as many Jews.

In addition to this, two Jews married Anglicans; two, Presbyterians; six, Methodists; two, Baptists; one, a Congregationalist. The Jewish ladies did not show such a variety of taste, but exhibited a strong Anglican leaning, for of the seven who married out of their faith five married Anglicans and two Roman Catholic husbands.

Analyzing the table still further, it appears that 631 Presbyterian ladies married Anglicans; 841, Methodists; 126, Roman Catholics; 41, Congregationalists; 55, Lutherans; and the selection of 74 are not classified.

Of the Methodist ladies, 678 married Anglicans; 910, Presbyterians; 157, Roman Catholics; 290, Baptists; 57, Congregationalists; 83, Lutherans; and six passed into the care of as many Salvationists, while 98 of their husbands have yet to be gathered into any particular fold which finds a place in the table, 25 frankly confessing to being of no denomination at all.

Roman Catholics have already been largely dealt with, and coming to the Baptists it is found that 200 chose their husbands from the Anglicans, 219 from the Presbyterians; 362 selected Methodists; 68, Roman Catholics; 21, Congregationalists; 26, Lutherans; 28, from the untabulated, and six of the gentlemen were unattached denominationally.

Fifty-seven Lutherans sought and got Anglican husbands; 71, Presbyterians; 78, Methodists; 85, Roman Catholics; one Hebrew and one Salvationist.

Altogether 87 Salvationists found their husbands in "the Army"; three married Anglicans; one, a Presbyterian; seven, Methodists; five, Baptists; and one is unclaimed.

Reviews

Catechism Series—Surgery. Part III. Second edition. Revised and enlarged. With plates. Price, 1 shilling. Edinburgh: E. & S. Livingstone.

This booklet embraces venereal diseases, scalp, cranium, brain, spine and spinal cord, face, mouth and tongue, pharynx, neck, goitre, oesophagus, larynx and trachea, ear. The questions are set out and the answers given in a clear, compact style. Students will appreciate going over, amongst themselves, these questions, in grind classes and just on the eve of examinations. We heartily recommend the entire series for this purpose.

Heart Sounds and Murmurs. Their Causation and Recognition. A handbook for students. By E. M. Brockbank, M.D. (Viet.), F.R.C.P., Senior Hon. Assistant Physician, Royal Infirmary, Manchester. With illustrations. Price 2s. 6d. London, 136 Gower St., W.C., H. K. Lewis.

As the title announces, this is a small book of 54 pages and index on the heart sounds and murmurs. It is designed for the use of medical students and, having examined it carefully, we can recommend it to them. As a means of gaining a rapid and compactly accurate knowledge of these conditions students will find the book of estimable value.

Webster's New International Dictionary. Editor-in-chief, Dr. W. T. Harris, late United States Commissioner of Education. Springfield, Mass.: G. & C. Merriam.

In this great volume, new from cover to cover a little over a year ago, we have developed the Webster tradition by modern scientific lexicography. It is the key to the literature of seven centuries. In it are defined over 400,000 words and phrases and the new information is practically doubled. The pages are divided. Thus on the upper three-quarters one will find the more important words, and the less important below. There are 2,700 pages and 6,000 illustrations. In scholarship, convenience, authority and util-

ity it easily stands the best. No college, school, library, business office, commercial house, doctor, lawyer, dentist, druggist can afford to be without a copy ever ready and handy to refer to on a moment's notice. In books it is one of the great productions of the day.

The Sensibility of the Alimentary Canal. By Arthur F. Hertz, M.A., M.D., F.R.C.P., Assistant Physician and Physician in Charge of the Department for Nervous Diseases, Guy's Hospital. 83 pages. 1911. $1.50. London: Oxford University Press. Toronto: D. T. McAinsh & Co.

This little volume is another of those modern series, like "Mackenzie on the Heart," that is a necessary addition to each physician's library. On consideration, what do we know on the subject of the cause of the gastric sensations our patients call "emptiness," "fullness," "burning," and so on? Do we realize that there is true visceral pain and that it is dependent on the muscle of the bowel? And do we know anything about the sensitiveness of the rectum and its relation to constipation?

Hertz has added a new chapter to the information that makes a physician's work the most enthralling profession of all, if he is cognisant of the basic laws, which make difficult cases readily understood. G. W. H.

A Text-Book of the Practice of Medicine. By James M. Anders, M.D., Ph.D., LL.D., Professor of the Theory and Practice of Medicine and of Clinical Medicine, Medico-Chirurgical College, Philadelphia. Tenth Revised Edition. Octavo of 1,328 pages, fully illustrated. Philadelphia and London: W. B. Saunders Company, 1911. Cloth, $5.50 net; half morocco, $7.00 net. Sole Canadian agents: The J. F. Hartz Co., Ltd., Toronto.

Dr. James Anders' ninth edition appeared in 1909, and the best recommendation for his text-book is given by the appearance of a new edition in two years.

There are a number of additions to different articles, including some more recent forms of treatment and new physical signs, but in the main the volume is the exact counterpart of the last edition.

In reviewing this some time ago the excellence of the book for senior students was emphasized, and one can well regard it as the equal of the "Medicine" it so much resembles, namely, Osler's.

The American Journal of Surgery, 92 William Street, New York, will issue in the early part of 1912 a special edition entitled "Special Western Number." This will be an exceptionally fine number. Our Canadian readers desiring a copy of same should enter their orders at an early date.

A Manual of the Practice of Medicine. By A. A. Stevens, A.M., M.D., Professor of Therapeutics and Clinical Medicine in the Woman's Medical College of Pennsylvania. Ninth Edition, revised. 12mo of 573 pages, illustrated. Philadelphia and London: W. B. Saunders Company. 1911. Flexible leather, $2.50 net. Sole Canadian agents: The J. F. Hartz Co., Ltd., Toronto.

This manual of 573 pages is most attractive to the eye, and, in addition, is printed in clear, large type on good paper.

It is naturally only suited to junior students or nurses, or as a handbook for more advanced but inexperienced workers.

It fulfils its object as a manual, and its nine editions in nine years shows that it is well appreciated.

The Ontario Medical Association will meet in Toronto under the Presidency of Dr. Herbert A. Bruce, on May 21st, 22nd and 23rd, 1912. Dr. F. Arnold Clarkson, College and Markham Sts., is the General Secretary.

Dominion Medical Monthly

And Ontario Medical Journal

EDITED BY

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COMMENT FROM MONTH TO MONTH.

Dr. James F. W. Ross, one of the leading and distinguished surgeons of Canada and America, died the 18th of November, at the residence of Dr. R. L. Langstaff, Richmond Hill. Two days before he was motoring to an out-of-town call, and while driving his own car with the chauffeur by his side the machine was suddenly flung into the ditch and Dr. Ross sustained injuries subsequently resulting in his death.

"In the midst of life we are in death" was never before so forcibly projected upon the minds of the medical fraternity: To some probably more so than others, for it was only a few weeks before, when Dr. Ross was temporarily occupying the chair at the Aesculapian Club, that deceased had launched a discussion upon the rights of the profession exceeding the speed limit in making emergency calls.

To Dr. Ross distinction in medical life came at an early age. A son of the late Dr. James Ross, a prominent general practitioner and obstetrician in his day, he began his medical studies at the old Toronto School of Medicine, having been graduated in 1886. He went abroad after graduation and studied gynecology under the celebrated Lawson Tait. In 1891 he returned to Toronto, entered practice upon the special branch of gynecology, later adding thereto abdominal surgery, and very soon became one of the recognized leaders in this work in America.

He took a prominent part in medical society work, not only in Toronto, Ontario and Canada, but as well in the United States. He could always be counted upon for a paper, an address or a discussion. He was a prominent member of the Canadian Medical Association, a past president of the Ontario Medical Association, of the Academy of Medicine, Toronto, and of the American Association of Obstetricians and Gynecologists.

When the Toronto Academy of Medicine was being promoted Dr. Ross took a leading part therein and did a great deal for the Academy at its foundation and subsequently.

Dr. Ross was well beloved by his immediate confreres in Toronto, scarcely one of whom but had had him either in consultation or for operation at some time or other.

In him Canadian medical journalism loses a generous contributor. His papers enriched the pages of our medical press.

"Jim" Ross will be remembered as an energetic man, a rapid operator, a skilled surgeon, a fluent lecturer, a lover and an ardent advocate of every measure tending to promote the welfare of the medical profession not only in his home city and province, but across the wide expanses of our great Dominion.

To the widow and family of deceased the DOMINION MEDICAL MONTHLY extends its heartfelt sympathy.

McGill University is to be congratulated upon the energetic and spirited campaign friends of that world-famous institution inaugurated and conducted during the week ending the 25th of November.

The total sum at first wanted was $1,000,000. The actual subscriptions amount to $1,540,873. This amount was received from 1,404 contributors.

It must be very gratifying to the promoters of this "whirlwind" campaign that such a large amount was realized. All good friends and well-wishers of the University will wish it further luck in securing the grant or annual subsidy of $100,000 requested of the Quebec Government.

Had McGill been forced to close some of its departments or to even curtail others, as it was feared, there would have been genuine sorrow all over Canada, not alone from graduates, but from many Canadians who are entitled to take just and patriotic pride in any of the great and famous institutions of our Dominion.

With two such munificent benefactors as Lord Strathcona and Sir William Macdonald, with the assurance that there are others sensible of their duty and vitally interested, with the prospective expression of sympathy on the part of the Provincial Government

later taking on tangible financial shape, McGill University may look forward to a future of almost imperial liberality.

McGill's work in British Columbia has recently been under discussion. There has been a great deal of misunderstanding regarding the part played by McGill University in educational matters on the Pacific coast, enough, in fact, to be sufficient to call for widespread dissemination of the truth.

At the outset it is necessary for emphasis to state McGill was invited to take up work in British Columbia and did not force itself upon the people of that province. By special Act of the Legislature of British Columbia in the year 1899, the Vancouver High School had its name changed to Vancouver College and began first year classes in Arts in affiliation with McGill University. So successful was this work that in 1902 affiliation was extended to embrace the second year.

Not considering this arrangement to be sufficiently substantial, the Legislature in 1906 empowered the McGill authorities to establish in that province the McGill University College of British Columbia. The same standards were to obtain and like subjects taught. The McGill authorities then took over the Arts work, extended the two years to embrace the third year, and added the two first years in Applied Science—McGill to conduct the examinations.

This College is entirely undenominational and is self-sustaining; and, therefore, the charge cannot lie that the College tended to financially cripple the home institution in Montreal, and must, perforce, fall to the ground.

There is a branch of the College in Victoria. In the Vancouver College there are 9 students in Arts and 33 in Applied Science, with a staff of twelve professors and lecturers. In Victoria there are 27 students with five teachers. It is expected that, at no very distant date, Vancouver will be in a position to support a complete Arts college. As years go on this will likely form the nucleus of a Canadian university on the Pacific coast, with Arts, Applied Science, Law and Medical faculties of its own. "Westward the course of empire takes its way."

The prevention of insanity, all will agree, is of the first magnitude. There is no disease to which the human flesh is heir that can compare to any one of those diseases of mentality commonly grouped under the single word—insanity. If this be not the age of preventive medicine, then we are on the threshold of it. If prevention can be applied to insanity, then the sooner there is

established a special society in this province—The Ontario Society for the Prevention of Insanity—the sooner will prevention take tangible form and the sooner will educational instruction take hold.

In the place of honor in the October issue of *The Bulletin of the Ontario Hospitals for the Insane* appears an article entitled—"Why Should Anyone Become Insane?"

The insane persons of Ontario number 6,803—one in every 367 of the population. In 1890 there were 4,210, the increase in the two decades being largely due to the desuetude of "asylum" and the ever-growing belief that these institutions are hospitals in the best sense and neither "asylums," places of refuge nor houses of detention. The misapplied word "asylum" has served its day just as surely as "lunatic" has been shoved over into limbo.

Setting aside all question of expense to the Province in caring for these unfortunate patients, and considering only the question of prevention of insanity as paramount, the writer of the article, we are sure, must have the best and most accurate ground for making the statement that fifty per cent. of the patients are so from avoidable causes. Then, clearly, there is a great field for prevention.

Syphilis was the cause and the antecedent of 32 male cases of paresis, an incurable form of insanity, admitted to the Toronto Provincial Hospital for the Insane during the year ending the 30th of September, 1911. Syphilis as a disease to be prevented would come under the purview of the health officer. Gonorrhea, too, in its train brings many disasters to innocent lives, but the people, especially the moralists, would scarcely consent to having these two diseases classed with other communicable diseases.

Alcohol and other poisons, physical diseases, worry and other mental bad habits, as well as heredity to a limited extent, are factors in the cause of insanity about which the people need educating.

How this education is to be brought about would be one of the early problems for an organization to determine. The passing of the knowledge from person to person, by teachers, the pulpit, the medical profession, the press, combined, would, in time, prove effective. The press would no doubt be the best means, as medical items are enticing morsels to most readers; and there is evidence in other countries, if not yet in Canada, that the way is being paved whereby the public press will be the great medium for the dissemination of knowledge of preventive medicine in all its various aspects. Of necessity this will mean the medical editor on the staff of the leading exponents of thought in the country.

News Items

Dr. Bromley, Pembroke, was visiting in Toronto recently.

Dr. Hutchison, Winnipeg, has returned from a visit to Europe.

Dr. Leeming, bacteriologist to the city of Winnipeg, has returned from Europe.

The medical students of Laval University, Montreal, held a banquet on the evening of the 14th of December.

Smallpox, which has been increasing in the Province of Quebec, has appeared in Montreal.

One woman physician and forty-four men were licensed by the Ontario Medical Council as a result of the fall examinations.

Drs. Lewis McMurtry and Chas. A. L. Reid of Louisville and Cincinnati, attended the funeral of the late Dr. J. F. W. Ross on the 20th of November.

St. Luke's Hospital, Montreal, treated 4,351 children in its dental department the past hospital year, and only 26 were found to have perfect dentition.

Dalhousie University, Halifax, has taken over the Halifax Medical College. All medical colleges in Canada are now administered under the authority of some university.

Dr. J. E. Dube, Montreal, has received a gold medal from the International Society Against Tuberculosis for his work in prosecuting a campaign against the "white plague."

Dr. J. D. Helmcken, Victoria, B.C., has been elected president of the British Columbia Medical Association; Dr. Chas. Doherty, New Westminster, Treasurer, and Dr. A. S. Monro, Vancouver, General Secretary.

The Montreal Maternity Hospital treated 802 patients during the past hospital year. The total receipts amounted to $27,057, being $4,000 more than for the preceding year.

The Quebec Government will give $3,500 annually towards the maintenance of a Hospital for Consumptives in that city. The cost of the new building will be $60,000, and it will be administered under the authority of the medical department of Laval University, that city.

Publishers' Department

Cough of Phthisis.—In the treatment of pulmonary tuberculosis the mitigation of cough is frequently of prime importance, since the repeated effort to expel accumulations of perverted secretions of suppurative materials is often of such degree that pleuritic pains are intensified and the patient is reduced to a state of extreme weakness. Furthermore, the interruption of sleep caused by frequent acts of coughing invariably brings about a marked depression of the vital forces.

The systematic administration of an agent which exerts a sedative influence upon the respiratory tract, modifies the pulmonary accumulations and invigorates the expulsive act is usually expedient, for the reason that the comfort and general well-being of the patient is substantially improved by such a course. It is, however, judicious to avoid the administration of any drug which is capable of producing by-effects that are detrimental, in any way, to the welfare of the patient. It is particularly important that the use of drugs which cause digestive disturbances, constipation or addictions should be eschewed, for such drugs always interfere to a very considerable extent with reparative processes.

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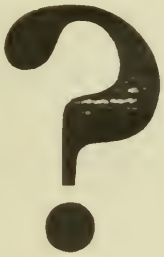

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The Medical Times.—Romaine Pierson, publisher of the *Practical Druggist*, of New York, has purchased from Dr. Alfred Kimball Hills the *Medical Times*, a publication just closing its fortieth year. In the December number Dr. Hills says editorially: "Mr. Pierson has had long and broad tutelage in the production of medical and pharmaceutical journals, from the counting room side thereof. He was for years an officer in the corporation owning and publishing the *New York Medical Journal*, figuring in that journal's purchase and incorporation with itself of the *Philadelphia Medical Journal* and the *Medical News*. His pharmaceutical journalistic experience covers a quarter of a century with the *Pharmaceutical Era*, *Druggists' Circular*, *American Druggist*, and for two years past as owner and publisher of the *Practical Druggist*, the latter having been brought in a brief period to a leading and commanding position. The journal will have the assistance of a well-equipped and experienced corps for all departments, and it may confidently be expected that the *Medical Times* will renew its youth and render even more satisfactory service to its clientele." Mr. Pierson has engaged Dr. H. S. Baketel as editor-in-chief of the *Times*.

Prevalent Diseases.—Each change of season brings with it, its diseases seemingly peculiar to the time. Summer with its intestinal disorders, sunburn, insect bites, ivy poisoning, etc. Fall presents for the attention of the physician, its typhoid cases, and winter and early spring, its regular quota of pneumonic, bronchial, throat and other chest conditions. At this season, when pneumonia and bronchitis demand the call of the physician, literature presenting the experience of fellow practitioners, in the successful handling of these cases, would seem most apropos. *The Bloodless Phlebotomist* for January reflects the experience of many physicians upon this timely subject. Dr. Charles Buck, of Cincinnati, presents his experience in handling cases of pneumonia, also relates some facts in the treatment of lumbago, which might also be considered as an affliction prominently manifesting itself at this season. "Broncho-Pneumonia" with supportive as well as local treatment in all its details, is the subject of the paper of F. A. Kantz, also of Cincinnati. Dr. E. Clinton Murray, of Houston, Texas, relates his experience and treatment in a case of pneumonia in an eighteen months old baby and Dr. J. C. Klippinger, of Independence, Kansas, presents a "Different Technique in Pneumonia," which is decidedly original. In abstract his method is to apply the local dressing in a manner

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which gives the intercostal muscles a chance to functionate without restriction from bandages. This symposium is closed with a paper from Dr. W. A. Radue, of Union Hill, N. J., upon "Acute Pleurisy and a Successful Abortive Treatment." Besides the papers referred to upon the subject of chest and throat diseases, much additional information is given. The one in particular we would have you note is the "Rational Influence of Hot Applications" by that well-known Therapeutist, Dr Finley Ellingwood, of Chicago, Ill. A postal card addressed to the *Bloodless Phlebotomist*, No. 57 Laight Street, New York, will bring you a copy of the January issue.

A Distinctive Piece of Literature.—"Here is something different." This is apt to be the first thought of the physician upon breaking the wrapper of Parke, Davis & Co.'s new brochure on bacterial vaccines and tuberculins. And the external appearance of the book is in no wise misleading. The "difference" applies to the printed page as well as to the handsome cover in artistically blended browns and gold. The brochure contains forty-eight pages in addition to the cover and thirteen full-page engravings in colors. The work is divided into three parts or sections. Some of the subjects considered in the first section are: "What is the Difference Between Bacterial Vaccines (Bacterins), Serums and Toxins?" "How are Bacterial Vaccines Prepared?" "Therapeutic Action of Bacterial Vaccines." "When Should Serums Be Used, and When Bacterial Vaccines?" The second section treats of the origin and nature of the bacterins, the relative merits of "stock" and "autogenous" vaccines, the opsonic index, and the best method of using the bacterins, together with a description of each vaccine, including references to preparation, therapeutics and dose. The third section is devoted to a consideration of the tuberculins, with dilution and dose tables, descriptions and illustrations of the various diagnostic tests, etc. Briefly stated, the booklet is a concise review of the essential facts relating to bacterial-vaccine therapy, containing precisely what the seeker after this kind of information wants. It is not padded with clinical reports—in fact, it contains none. We understand that Parke, Davis & Co. will be pleased to send a copy of this unique and valuable brochure to any physician requesting it. Address them at Walkerville, Ont., specifying the "new booklet on bacterial vaccines," and mention this journal.

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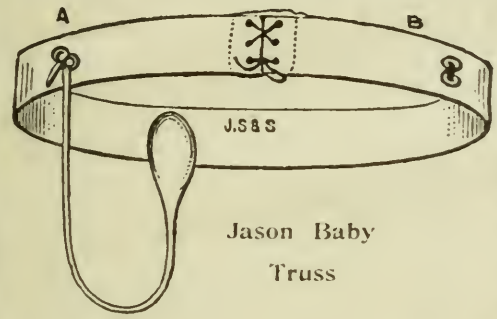

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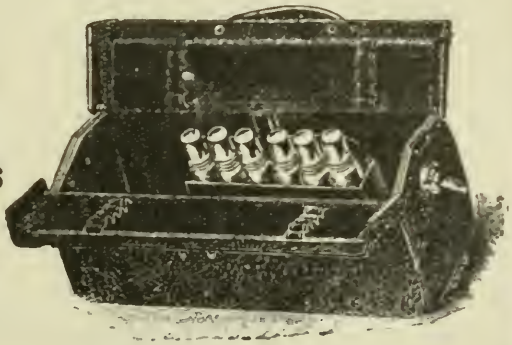

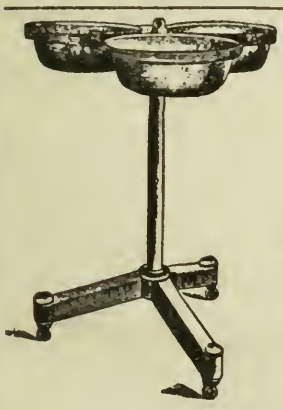

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Boiled Milk as a Food for Infants.—The Local Government Board have done good service in causing an inquiry to be made into the relative advantages of boiled and raw milk as a food for young children. The investigation was placed in the very capable hands of Dr. Janet E. Lane-Claypon, whose report has recently been issued in the series of public health reports published by the Board. Dr. Lane-Claypon points out, to begin with, that experimental evidence confirms the conclusion derived from clinical experience as to the superior results obtained from feeding infants or young animals with the breast milk of an animal of the same species, and emphasizes the opinion that infants should be fed on the breast unless there is an urgent reason to the contrary.

In addition to giving the results obtained by a large number of other observers, Dr. Lane-Claypon herself conducted an inquiry with material obtained personally at the infant consultation of the Naunyn Strasse in Berlin, which is under the direction of Dr. Ballin. The average daily attendance at the consultation is 100. The milk supplied for the children is produced with great care, and is of a high standard of purity, it is delivered cooled, and the mother is directed to bring it to the boil and allow it to froth up twice before using it, and is personally instructed in the matter by a health visitor. The object of Dr. Lane-Claypon's investigations was to compare the nutrition as measured by weight of infants fed on the breast and on boiled cow's milk. For this purpose she dealt with two main series of infants. In the first were healthy babies of the average artisan class, fed upon milk in various forms, in order to have a control consisting of the average baby. In the second were healthy babies of the same class, but fed only upon boiled cow's milk, in order to study the difference, if any, produced upon the average baby by feeding it exclusively upon boiled milk, as compared with the infant of the first series. The result of her investigations, which were characterized by a thoroughness and care enhancing their value, is given in a series of tables and diagrams, all of which well repay a close study. The general conclusions arrived at are of importance. They are that there is apparently no serious loss of nutritive value produced by feeding an animal upon boiled milk derived from an animal of the same species; that when an animal is fed upon the milk of another species, the milk from which has been found to be suitable for this purpose, such small differences as have been found in the nutritive values of raw and boiled milk have been in favor of boiled milk, and that the milk of

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the same species has a considerably higher nutritive value for that species than the milk of any other species.—*The Medical Officer.*

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A New Method of Passing the Bronchoscope.—Johnston (*Maryland Medical Journal*, June, 1911) states that his new method of passing the bronchoscope in the straight position has worked admirably, and has proven so easy that the work has become a pleasure. The method is as follows:

The patient is placed on the table with the head in the normal straight position. A general anesthetic is administered. The modified direct laryngoscope is passed straight down between the incisor teeth, and when the epiglottis comes into view the spatula end of the instrument is hooked behind it. By making slight pressure on the upper teeth the epiglottis and base of the tongue are pulled up and the larynx opened for inspection. A weak solution of cocaine is now applied to the larynx through the tube to prevent reflexes. With the laryngoscope in position, the bronchoscope is passed through it to the vocal cords. With the eye fixed on the end of the smaller tube a slight twisting motion is used, which sends the bronchoscope between the cords. The breathing is now distinctly tubal in character. The laryngoscope is removed and the head of the patient gently lowered over the end of the table. The examination is now proceeded with as in the extended position. In the above procedure the operator stands to the left of the patient and uses the laryngoscope in the left hand. Both direct laryngoscopy and bronchoscopy are easier because the muscles are relaxed.—*Therapeutic Gazette.*

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Original Articles

*TREATMENT OF TYPHOID FEVER.

By Graham Chambers, B.A., M.B.

Associate Professor of Clinical Medicine, University of Toronto; Physician Toronto General Hospital.

The treatment of typhoid fever which is in general use at the present time might be designated an expectant and symptomatic method. We allow, in a way, the disease to "run" its course, but, by treating the patient and protecting the various organs and tissues of the body, hope to mitigate the effect produced by the disease process, and to prevent accidents and complications. In carrying this out one should keep in mind the nature of the disease, the manner in which the bacillus of Eberth produces the various manifestations, and, also, the pathogenesis of the complications.

Typhoid fever begins as a general infection—bacillemia. Indeed, the general infection has been known to exist before the incidence of fever. However, most of the manifestations of the disease are not caused directly by the specific bacilli, but by endotoxins liberated by their solution. Thus we have two causative agents of symptoms, namely, a bacillemia and an endotoxemia. In addition one might add a third or rather a group of agents, composed of the various bacteria, such as pneumococcus, streptococcus, etc., which cause secondary infections. One might illustrate these relationships by means of the following table:

Bacillemia—Roseala, meningitis, cholecystitis, osteomyelitis, broncho pneumonia and lobar pneumonia.

Endotoxemia—Fever, headache, dry tongue, disturbance of digestion, diarrhea, meteorism, engorgement and necrosis of Peyer's patches and solitary follicles, ulceration of intes-

* Read at the meeting of the Ontario Medical Association, June, 1911.

tine, intestinal perforation, low blood pressure, cardiac weakness, dicrotic pulse, arteritis, myocarditis, delirium, stupor, tremor and meningism.

Secondary Infections—Pneumonia, broncho-pneumonia, sepsis.

Of course a relationship exists between these groups as the bacillemia gives rise to the endotoxemia, which, itself, no doubt, predisposes the patient to secondary infections.

The advantages to be gained by keeping this classification in mind while determining on the treatment of a case is that our methods are likely to be more rational. For instance, in fighting the bacillemia one can understand the benefit to be derived from quietness, fresh air and the selection of a dietary in keeping with the assimilative powers of the patient, because these measures should tend to increase the resistance of the body against the bacilli, but one cannot understand how starvation for a week, as advocated by some, can be of service. The giving of any vaccine, serum or drug which will increase the antibodies of the blood is rational.

From theoretical considerations typhoid vaccine should be of value as a preventive measure and clinical observations appear to support this view. As a curative agent, however, there does not appear to be any evidence to show that it is of any value. Again, the giving of any drug which will increase the antibodies of the blood is rational therapy. Smith (*Lancet*, Nov. 10, 1910) reports that the administration of quinine increases the opsonic index of patients with infectious fevers. If this be true, the giving of quinine in typhoid fever would be rational therapy.

The importance of having a substance which will increase the potency of the antibodies in the blood is well illustrated by the fact that in cases of relapse, a condition in which one would expect the bactericidal substances of the blood to have been augmented by the primary attack, a fatal termination is uncommon. In 1,236 cases of typhoid fever treated at the Toronto General Hospital during six years ending September 30th, 1910, there were 65 relapses, of which only one died. In the fatal case the course of the fever was unusual and the temperature was normal for barely 24 hours preceding the relapse.

Again, in the treatment of bacillemia if one had an antiseptic which when administered internally would exercise a germicidal action in the blood, as mercury and salvarsan do in syphilis, its exhibition would be correct, but the principle of giving intestinal antiseptics for the same purpose is utterly unsound.

In the treatment of the endotoxemia of typhoid, if we believe

that the endotoxins are excreted in the urine, the giving of large quantities of water by the mouth or rectum is invariably indicated in the early stages of the disease. In the later stages it may also be indicated, but there are a number of contraindications, such as hemorrhage, early symptoms of perforation, and cardiac weakness. The last mentioned has not received the attention it deserves, as it is my belief that, frequently, large quantities of water are given in a routine manner throughout the course of the disease, which procedure in cardiac weakness might produce pulmonary stasis. This I have observed in practice. It should also be remembered that in many fevers there is frequently a tendency to retention of water, which should be taken into account in determining upon the quantity of water to give a typhoid patient, especially one suffering from cardiac weakness.

Again, if we believe that endotoxins are excreted into the intestines, the exhibition of laxatives or possibly mild cathartics is sound in principle, especially in the early stage of the disease. Clinical experience, I think, supports this view. It is unnecessary for me to mention that the profession are not a unit with regard to the use of purgatives in the treatment of typhoid. Some advocate strong cathartics producing eight or ten evacuations in twenty-four hours. This, I think, is wrong because it disturbs digestion, may depress the patient and possibly precipitate hemorrhage or perforation. On the other hand, there are others who never use a laxative after the ninth or tenth day of the disease for fear of producing hemorrhage or perforation, but make use of a simple enema once a day to empty the lower bowel. They believe that a laxative per rectum is less dangerous than one per os, although both increase peristalsis of the whole intestine.

For my part, in mild cases, I am accustomed to order an enema every morning after the ninth day of the disease, although I believe there is practically no danger in administering a laxative to a patient who shows no manifestations of hemorrhage or intestinal perforation. In highly toxic cases I feel that a laxative or simple purgative is preferable because it is more likely to diminish the endotoxemia. In my practice I frequently make use of castor oil followed in two hours by an enema. Half an ounce of the oil is given every morning. This is followed in two hours by an enema of 2 drachms of turpentine, 4 ounces of olive oil and 2 ounces of soap solution, administered with a barrel syringe. Half an hour later a simple enema is given, which, as a rule, produces a free evacuation with very little disturbance to the patient. The advantage of this combined method is that a better cleansing of the whole intes-

tine takes place, which is essential because we know in typhoid fever typhoid bacilli are frequently present in the bile and upper intestinal tract. If one uses an enema alone, this cleansing of the upper bowel is not obtained to the same extent. In highly toxic cases, therefore, I should advise the giving of castor oil every morning as a means of diminishing the endotoxemia, and, I think, clinical experience will support this method. With regard to the danger of hemorrhage and perforation after the administration of a mild purgative, I wish to call attention to the fact that both these accidents are essentially due to ulceration, which itself is the result of endotoxemia. I might also mention that with the daily administration of a purgative, associated with careful dieting, one is able to control meteorism, a complication which, if associated with hemorrhage, frequently makes the treatment of the latter manifestation very difficult indeed. The explanation of this is probably that a contracted intestine tends to stop the bleeding.

In the consideration of the subject of secondary infections I shall limit my remarks to one or two suggestions in the preventing of lobar pneumonia and broncho-pneumonia, two of the most serious complications.

First I should mention that lobar pneumonia occurring in the course of typhoid fever is generally due to a secondary infection, rarely to the typhoid bacillus. Its genesis should therefore be generally the same as that lobar pneumonia occurring as a primary disease. In pneumonia caused by the pneumococcus we are agreed that exposure is a predisposing cause. The question is—does the same ever occur in the pneumonia occurring as a complication of typhoid? I should not like to make a definite statement in answer to this, but I am inclined to the view that exposure is a not uncommon causative factor.

The consideration of the prevention of broncho-pneumonia is beset with great difficulties. The post-mortem examination of typhoid patients shows that broncho-pneumonia is generally associated with hypostatic pneumonia, and clinical experience would appear to indicate that the hypostatic is usually the primary affection. If this be true then we should pay especial attention to the treatment of pulmonary stasis and cardiac weakness. The exhibition of strychnine, camphor and other cardiac stimulants might aid in preventing this complication.

I wish now to call attention to some points in the treatment of special symptoms and manifestations. This is a very important part of the therapy of typhoid fever. In the consideration of this subject I think one gets considerable benefit from the study of the

prognostic value of the various manifestations and complications, because the knowledge so obtained tends to make one more active in the prevention of dangerous conditions and in their treatment at their incipiency. The following is a list of some of the manifestations and complications which should, I think, be looked upon as danger signals:

High Fever.—The degree of fever is of great importance in prognosis. In cases characterized by low or moderate degree of fever the prognosis is generally favorable. If the temperature does not reach the height of 104° F. I should say that the mortality is less than 2 per cent. On the other hand, high fever, especially if unaccompanied by marked remissions and difficult to lower by hydrotherapy, is a dangerous sign.

Dry Tongue.—This should only be considered a danger signal when the whole dorsum is dry.

Diarrhea.—In cases in which care is exercised in the selection of a dietary, diarrhea is not a common symptom even in severe infections, but when present under such conditions it is always a dangerous sign.

Meteorism.—Distension of the abdomen is generally present in typhoid fever, being caused partly by fermentation or putrefaction of food and partly by disturbance of the neuro-muscular apparatus of the intestine. The first cause can be removed to a great extent by treatment, but the second, being due to endotoxemia, cannot be influenced by treatment to the same extent. Meteorism, therefore, uninfluenced to any marked extent by treatment should be considered a danger signal. I might add that marked meteorism associated with hemorrhage makes a specially dangerous combination of symptoms.

Delirium.—This is a common symptom in severe cases. The manifestation becomes more unfavorable if accompanied by insomnia, and especially if uninfluenced by hydrotherapy.

Spasticity of Muscles.—This is a very dangerous manifestation. It may be due to meningitis, exudation or purulent, caused by the typhoid bacillus, but is generally the result of an inflammation of the meninges without exudation—meningism.

High Rate of Pulse.—In typhoid fever the rate of pulse relative to the temperature is slow, particularly in the early stages of the disease. A high rate, say about 115, indicates a disturbance of the nervous mechanism of the heart or myocarditis, and should be considered a dangerous sign.

High Rate of Respiration.—This is a danger signal of first-rate importance because it suggests the presence of a pneumonia. How-

ever, a respiration rate of 30 may be due to the fever and endotoxemia. If pulmonary stasis is also present, then a higher rate is not uncommon, but with a remission of the temperature the frequency of the respirations materially diminishes.

Intestinal Hemorrhage.—The profession are not in accord with regard to the prognostic value of this manifestation. In some cases the condition of the patient improves immediately following a hemorrhage, and it has been suggested that this is due to diminished endotoxemia caused by the loss of blood. This is observed so frequently in practice that there can be no doubt of its truth. In many cases, however, hemorrhage produces no appreciable improvement, and the manifestation is soon followed by others of more serious import, such as symptoms of cardiac failure or intestinal perforations.

Pain in Abdomen.—This is a very important symptom of intestinal perforation. The presence of abdominal pain should, therefore, be a danger signal and an indication for a thorough and prolonged examination of the patient.

In this paper I shall only consider the treatment of the first-mentioned danger signal, namely, high fever.

The treatment of fever is, I think, an important part of the therapy of typhoid fever. There are probably two reasons why this is the case: First, high fever is usually a sign of severe infection; and second, a high degree of fever probably causes disturbances of metabolism, nervous system, etc., irrespective of the origin of the fever. In the treatment of the manifestation it is well, therefore, to try to diminish the intensity of the endotoxemia and to use means to prevent the temperature running at a high level. I have already referred to the general principle of treating the endotoxemia. These, unfortunately, applied in severe infections, have generally very little effect on the course of the temperature. In these cases one has to depend upon more direct antipyretic methods—such as cold baths, sponges and antipyretic drugs. It is not my intention in this paper to consider at length the advantages and disadvantages of cold baths or sponges in the treatment of fever. I shall merely mention my belief, which I think is that of most physicians, that external hydrotherapy is the most valuable therapeutic measure we possess in the treatment of typhoid. However, there may be a difference of opinion as to the manner in which the beneficial effect is brought about. Some contend that a reduction of temperature has little to do with it, but the benefit is essentially due to the improved state of the nervous, respiratory and cardiovascular system and to increased excretion of endotoxins. At the height of the attack, in severe cases, cold baths fre-

quently have little influence on the temperature, and these physicians maintain that this is an unimportant consideration. My belief is that this is incorrect. According to my experience the mortality is much higher in cases in which the fever is uninfluenced to any extent by cold baths or sponges than in those in which it is readily diminished by the same measures; and it is probable that the high fever in itself, without considering its origin, is an important cause of this difference. In support of this contention I wish to call attention to the fact that, although the temperature of typhoid fever is frequently high, it is usually unstable in character, being more readily influenced by cold baths or antipyretic drugs than the fevers of most other infections. For instance, 3 to 5 grains of acetyl-salicylic acid (aspirin) every four hours will in most cases produce a marked reduction in the temperature. Is it not probable, therefore, that the benefit derived from external hydrotherapy in the treatment of typhoid fever is partly dependent upon the readiness of the temperature to be influenced by such treatment? If this is true, it seems to me that it is rational in cases characterized by high fever, say above 104° F., in which we are unable to influence the temperature by hydrotherapeutic measures at our command, to bring to our aid an antipyretic drug. For this purpose I prefer acetyl-salicylic acid (aspirin) because it is sufficiently effective in small doses—generally 3 to 5 grains, rarely 6 to 7, every four hours—and at the same time does not alter the blood pressure and rarely produces any deleterious action. In the administration it is important to limit the quantity to the minimum dosage, associated with sponging the body, which will moderate the fever rather than bring it to a low level, because a temperature at the height of the disease, from 102° to 104° F. may be helpful rather than harmful. I usually commence by ordering 3 grains of the drug to be given every four hours and that each dose be followed in half an hour by a cold sponge, as in this way one combines the antipyretic agents. If this dosage does not produce the desired effect the quantity of drug should be increased until sufficient action is obtained.

*CANADIAN PUBLIC HEALTH ASSOCIATION.

First Annual Meeting, Montreal, Dec. 13th, 14th, 15th, 1911.

His Royal Highness, the Duke of Connaught, on the evening of December 13th, 1911, inaugurated the first Congress of the Canadian Public Health Association, and in the course of a lengthy speech emphasized the great need for the improvement of the public health of the Dominion by the supply of pure water, by proper methods of sewage disposal, by lessening infant mortality, and by a greater general attention to matters of hygiene.

Premier Borden was present, and heartily endorsed the aims of the association, saying he did not think the Federal Government had done enough in the past to protect the public health. Hon. Mr. Martin Burrell, Minister of Agriculture, went further, and hinted at the early establishment of a department at Ottawa for dealing with the public health, while Sir Lomer Gouin told of the project for dividing the Province of Quebec into ten districts, which plan was only yesterday adopted by the Provincial Board of Health; each in charge of a qualified hygienic expert, and another project for establishing a provincial hospital for consumptives.

The Duke of Connaught was accompanied by the Duchess, and by Princess Patricia, and there was a large gathering of eminent physicians and prominent citizens to greet him. The meeting took place in the Royal Victoria College.

Dr. T. Starkey presided, and those present included: Premier and Mrs. Borden, Sir Thomas and Lady Shaughnessy, Sir James Grant (Ottawa), Dr. T. Starkey, Sir William and Lady Van Horne, Hon. Martin Burrell and Mrs. Burrell, Principal and Mrs. Peterson, Premier and Lady Gouin, Archbishop Bruchesi, Dr. Fisher (New Brunswick), Dr. Coulter (Toronto), Dr. Higgins (Ottawa), Dr. Shepherd, Capt. Worthington, Dr. Johnson, Col. Carlton Jones (Ottawa), Lt. Ramsay, Chief Justice Sir Melbourne Tait and Lady Tait, Justice and Mrs. Archer, Canon Dauth, Mayor Guerin, Miss Guerin, Capt. Guerin, Bishop Farthing and Mrs. Farthing, Archdeacon Norton, Ald. and Mrs. Dandurand, Lansing Lewis, Lt.-Col. Burland, Dean Adams, Clarence I. de Sola and Mrs. de Sola, Dr. A. P. and Mrs. Laberge, Dr. Lachapelle, D. McNicholl and Mrs. McNicholl, T. Chase Casgrain and Mrs. Casgrain, Justice and

* Montreal Star report.

Mrs. Greenshields, Lt.-Col. E. M. and Mrs. Renouf, Dr. T. and Mrs. Starkey, Dr. Adami, Milton Hersey, Prof. and Mrs. Porter, Senator and Mrs. J. T. B. Casgrain, H. B. Ames, M.P., and Mrs. Ames, Ald. and Mrs. Rutherford, Dr. and Mrs. Blackader, Miss Hurlbatt, Campbell Lane, E. Fabre Surveyer and Mrs. Surveyer, Dr. Louis Laberge, Dr. Duncan Anderson (Toronto), Dr. Montizambert (Ottawa), Mr. Aird Murray (Toronto), Dr. Douglas, Dr. Hodgetts (Ottawa), Major Lorne Drum (Ottawa), Dr. George Porter (Toronto), Dr. McCullough (Toronto), and Dr. Adam Wright (Toronto).

Dr. Starkey, in opening the proceedings, expressed the great pleasure it gave him to welcome Their Royal Highnesses, in the name of Canadian Public Health Association. The Duke of Connaught, he said, would not only be a patron of the Association in the usual sense, but intended to take a very active interest in sanitation, and in the affairs of the Association. The first vice-president, Lord Strathcona, also took a practical interest in the Association, and had sent, quite unsolicited, a cheque for $2,500 for its funds, while Premier Borden was the second vice-president, and the Commission on Conservation gave the Association its most cordial support.

The primary aim of the Association was the diffusion of sanitary knowledge. To this end, they must induce the public to join them, and to take an active part in the work, and get the laymen to co-operate with the professional men who gave their lives to the study of the problems of sanitation.

The Duke of Connaught, who had a very cordial reception, said: "I desire first of all to express my deep satisfaction at being present at this meeting, which has been called to organize the Canadian Public Health Association. Of the many subjects which are awaiting solution in Canada, none is so important to my mind as that of the health of its inhabitants, both adults and infants. It is a subject which affects every one of us individually, and we owe it to ourselves and to the rising generation to see that conditions are improved as far as lies within our power.

Public health is a question which rises above all politics, and it is the duty of the whole nation to join in promoting the objects of the Association which is now gathered here.

The urgent necessity for improvement in existing conditions is forced on our attention by the reports of epidemics of typhoid, diphtheria, and smallpox, which occur all too frequently, in the press, and by the study of statistics of infant mortality in your great cities. The aims and objects of this Association, as outlined

by the President, are most commendable, and the idea of expanding the membership so as to include all kinds of workers in the domain of sanitation is a wise one, because so many of the general public outside these professional men actually engaged in sanitation work are becoming extremely interested, and would gladly welcome any means whereby they could learn the better to conserve the public health.

Such information can only be obtained from experts, and it is at congresses such as these that opportunities are given for receiving and imparting instruction. Many of the general public are laboring under the delusion that to avoid epidemics and to bring health into their daily lives they must be equipped with deep scientific knowledge. That is a totally erroneous idea. Profound knowledge and deep research on the part of the scientists are required in order to arrive at logical and exact results in the field of hygiene, but these results and their application to our daily lives are profoundly simple and straightforward.

As an educational movement, the Association is of paramount importance, for what education or knowledge is so important as that of learning how to obtain health by avoiding and preventing disease, and so obtaining a sound body in which to clothe a sound mind? Thus the healthy upbringing of children in their homes and in the schools is a point of the most vital interest to everyone. This question of the education of children in hygienic matters has been undertaken more or less in most countries, but a great deal still remains to be done in that direction. Attention must be given, not so much to the task itself, as to the general routine of the daily life.

Having secured in this Association the means of teaching the public, we have to consider how best to apply this teaching in order to get the best value out of it. Everything seems to point to the education of the coming generation as the best field for our energy. While the young are being instructed, those of their parents who are desirous of learning will be able to do so, but we shall not waste our time by competing against that obstinacy and apathy which in grown people so often takes expression in the familiar saying, "Let things alone. What was good enough for our fathers is good enough for us."

What was good enough for the last generation is not good enough for the present. On the land where Ottawa now stands Indians were scalping one another a hundred years ago, but who would be so rash as to pretend that sanitary conditions have not changed since then? In those days pure water and pure air were

universal in Canada. The growth of the great cities and the settlements has altered this state of things for the agglomeration of people is inevitably accompanied by the seeds of disease.

While on the subject of crowded settlements, let me say how glad I am to hear of the garden city movement having been started here in Canada, and I trust it may meet with the success it so richly deserves. To provide decent homes for the people outside the congested districts is a sure step in the direction of the improvement of the public health, and I have no hesitation in recommending the garden city movement most strongly to your favorable consideration and support. It will go far towards minimising the difficulties on the score of health which are met with in places where the population is increasing at a rate out of proportion to the accommodation provided for them.

Speaking of sanitation in connection with children, the thought naturally arises of the movement started in nearly all countries to reduce the terrible infant mortality which is so prevalent everywhere. It is gratifying to know that this topic, as well as those relating to the hygienic well-being of children, is going to receive the attention of this Congress.

Again, it is a matter of congratulation that among other very important questions relating to the welfare of the people to be discussed, are such questions as sewage disposal, the supply of pure drinking water, the housing of the working classes, etc. All these are extremely urgent, and affect the welfare of large masses of the population of Canada. The first two have become so urgent that action of some kind is contemplated both by the Federal and Provincial Governments, judging by the questions brought up in the legislatures, and doubtless anything tending to the solution of these problems, that may be brought out of this meeting, will be available for the benefit of these legislatures.

We must make it an object to impress on the public the necessity of obtaining health by the prevention of disease and not by its cure. Under the heading of preventive medicine comes vaccination and other forms of inoculation. I know that vaccination has many antagonists, and I have no wish to enter into any argument on the subject. I will confine myself to the simple statement of the fact that in the cemetery of Gloucester, in England (lie the bodies of 276 unvaccinated children, who died during the smallpox epidemic of sixteen years ago. Only one vaccinated child lost its life in the same epidemic.

It is only when the people have thoroughly grasped the full meaning of any movement that legislative bodies can begin their

work. Legislation, without the intelligent support of the public, is useless, and it would be wise for all of us to appreciate the fact that legislation in respect to sanitation is honestly intended for the benefit of us all, both individually and collectively.

Such being the case, we ought to give our full support to the authorities administering the laws. Here, as in most countries, there are laws designed to protect the workers in dangerous trades, but the vast majority is left to look after its own health. It rests with them to protect themselves against the ravages of disease.

I now have great pleasure in fulfilling the mission with which I am charged this evening, namely, that of inaugurating the Canadian Public Health Association, and in declaring this Congress open. In concluding my remarks, I wish you most successful results from the work you have undertaken, and I trust you will be able to provide the necessary impetus to this movement, which is designed to bring about the permanent amelioration of the conditions of the public health in this great Dominion."

Premier Borden, in expressing his entire sympathy with the objects of the Association, said that it seemed to him that, under present conditions, there was no more worthy work that could engage the attention of good citizens than that of the improvement of the public health. He did not think that as much had been done in this direction in Canada in the past as ought to have been done. It was true that a branch of the Department of Agriculture was organized for the purpose of attending to public health matters, but he did not think the Federal Government had done so much as it should in this direction. In the matter of public health, Canada had muddled through somehow, but it ought not to leave the question to haphazard any longer. When it was considered how much of the energy of the people and the nation was dissipated by disease, simply through drinking impure water, and by neglect of sanitation, they would realize that, from the standpoint of national efficiency, this subject should be dealt with in an effective way.

Many phases in connection with those momentous problems of town planning and housing were introduced at the afternoon meeting on December 14th of the Canadian Public Health Association.

Adequate statutory provision by each province in the Dominion to deal with the whole question, was a strong recommendation made and endorsed; and to prevent multiplication of Government officers, it was suggested that the powers of the administration of the Act be placed under the Department of Health, which must be enlarged by the addition of qualified officers to deal with the subject.

Large apartment houses and jerry buildings came in for strong condemnation. In place of these, garden cities and model dwellings, situated in the suburbs, were advocated, with cheap and rapid means of transit, preferably underground. The idea of Canadian cities trying to convince themselves that they had no slums was ridiculed, and the sooner steps were taken to remedy the evil the better it would be for the community at large.

Dr. Charles A. Hodgetts, Medical Adviser of the Commission on Conservation, Ottawa, in his paper on "Town Planning and Housing," stated that one must acknowledge that we are behind the times, and Canadians have made, and continue to make, serious mistakes in the laying out of cities and towns, and in not planning for their development. Acknowledging this fact, it was our duty as citizens to learn by the mistakes of the older countries of Europe.

The lumber town of forty years ago, Dr. Hodgetts said, is still a lumber town, overgrown; it has not risen to realization of its importance or to the dignity of its position as the Federal Capital of a great and growing nation. Nor does the great seaport of Canada, its commercial capital, present any outstanding features to lead one to eulogise the foresight of its wealthy and intelligent citizenship, or the system adopted of converting a once fine family residence into an apartment house or tenements of the worst type. All the new and older cities are, from the town-planning and housing standpoint, monstrosities.

He noted the tendency, which is in evidence in all these cities, of the method of warehousing humanity in apartment houses of all grades.

Posterity would come to curse the day when they were permitted to dwell in such places. To attempt to work the remodelling of our cities and the planning for the future without first securing proper legislation, would, in his opinion, be misspent time. We would also require more definite and exact legislation on unsanitary housing and unsanitary areas. He concluded by enumerating some of the advantages to be derived from town-planning, among them being improvement in general health and morals, reduction of death rate, provision of cheaper and more healthy homes, suitably located open spaces, and absolute prevention of slums, with all their attendant evils.

Dr. J. E. Laberge, assistant city medical health officer, Montreal, spoke on "Town Planning and Housing." He touched on the question mainly from the hygienic point of view.

Until recently this important matter received little consideration from the public authorities, due to the ignorance of the public in matters of hygiene.

Have wide boulevards in the places to which you transfer the people from the crowded slums. Let these outside surroundings be places where the people can obtain air, light, good and abundant supply of water, and good housing. This work should not be left to outside enterprise, but should be taken up by the municipal authorities. To educate the citizens to see that their city becomes large, beautiful, healthful, sound and prosperous.

Dr. Charles J. C. O. Hastings, City Medical Officer of Health, Toronto, in a paper on "House Problems," described the unsanitary conditions existing in the slum districts of New York, Milwaukee, and Toronto. Toronto had its slums, the same as other cities, and it was no use for people trying to disguise the fact, and they must wake up, like other cities, to the prevailing conditions, and not live in a "fool's paradise." In Toronto, he said, there were 919 families living under distinctly unsanitary conditions, some only in one-room tenements or in cellars. Slums were veritable hotbeds of vice and crime, as they are of disease, and cities must see to it that they were eradicated. Tenement houses he declared to be nothing more or less than mere packing houses—human packing houses; and he concluded by urging the securing of transportation to districts on the outside of cities, where people could be properly housed in individual homes, in beautiful garden cities.

Mr. Rickson A. Outhet, Montreal, read a paper on "Municipal powers in dealing with town-planning schemes," which mainly dealt with the town-planning in operation in England, and how these schemes could be applied to Canadian cities.

Mr. W. D. Lighthall, K.C., speaking on the subject of "Re-housing in Canada," dwelt upon the "jerry-built" tenement houses, one-room tenements, and even cellar abodes, prevalent in Canadian cities, particularly so in Montreal. Not far from the City Hall, a physician told him, the previous night, that he had found sixteen foreigners sleeping in two rooms, only suitable for one man in each, and with windows tightly sealed. He urged the planning of new districts at once, to relieve the slum districts. He knew of only two re-housing instances in Canada, those of Mr. H. B. Ames, M.P., and Lieut.-Col. Carson, both in Montreal, and they have paid well. He thought that the model suburb and model tenement would have to be combined in one company. This was done successfully in New York.

Other papers were read by Mr. Percy C. Nobbs, Montreal, on "Statistics on Housing," and by Mr. Colborne Meredith, Ottawa, on "Town Planning."

The annual dinner of the Association was held at the St. Regis Hotel, December 14.

Many of the problems which are confronting the civic authorities of Montreal at the present moment were discussed at the sessions of the Canadian Public Health Association Congress, in the McGill University medical building, prominently among them being the questions of food inspection, milk supply and milk depots. Meetings of four sections, namely, Medical Officers of Health, Dr. Louis Laberge, convener; Laboratory Workers, Dr. J. A. Amyot, convener; Sanitary Engineers and Architects, Mr. T. Aird Murray, convener, and Social Workers, Dr. Grace Ritchie England, convener.

Great importance was attached to the manner in which milk is delivered to the householder, and it was argued that it would be more safe for milk to be delivered from the can, as no system in force can ensure that bottles are properly cleansed and sterilized. It was advocated that milk sellers who are personally dirty in their habits or are considered otherwise unfit should have their licenses cancelled.

Food inspection was considered a pressing problem of the day, owing to the conditions of the hustling modern life necessitating hurried meals away from home, and how necessary it was that all places where these meals were obtained were properly inspected for cleanliness and sanitary arrangements, as well as the food itself.

Water supply, sewage systems, removal and disposal of house-garbage, town planning from a sanitary standpoint, ventilation in private houses, vaccines and the common cold, medical inspections of schools, women as sanitary inspectors, high infantile mortality in large cities and the influence exerted by milk depots, what the Federal Government might do to assist in the control of tuberculosis, and playgrounds were amongst the other important matters dealt with.

Mr. P. B. Tustin, Chief Food Inspector, Winnipeg, read a paper on "Municipal Food Inspection," which was much discussed, as was also a paper by Dr. W. T. Shirreff, Medical Officer of Health, Ottawa, on "Municipal Milk Supplies."

Mr. Tustin traced the precautions taken, and the penalties imposed by the ancient Egyptians and ancient Romans, in regard to food inspection, and he declared that if it was necessary then it is consequently more necessary in these days of refrigerating and canning.

Present-day rush calls for a strict inspection of all places where food is stored, prepared, offered for sale and sold. Food inspection, to be efficient, should cover the inspection from the raw material to

the finished product, sanitation of premises, and the cleanliness in habits and in person of the people preparing the food.

On taking over the dairy inspection in Winnipeg he realized that the cause of much of the unclean milk was due to ignorance on the part of the dairymen, rather than their wilful negligence.

The cardinal fact to be borne in mind in regard to milk supply, Dr. W. T. Shirreff stated, is that it should be used before it is 48 hours old. He advocated an educational campaign amongst the farmers and dairymen in preference to drastic regulations to secure proper sanitary surroundings and to secure a pure milk supply.

Members of the Canadian Public Health Association Congress were guests of the Montreal Water and Power Company and were shown the sterilization and filtration plants of the company.

Since sterilization, the Montreal Water and Power Company claim that the water drawn and supplied by them from the St. Lawrence River has been safely guarded from pollution of any hygienic significance.

In order to meet the spring and late autumn conditions and furnish at all times a clear and practically colorless water, the company decided to instal the filtration plant presently nearing completion. The plant is of the type known as the rapid gravity sand filter and depends for its efficiency largely on the use of a coagulant. The rate of filtration will be in the neighborhood of 125,000,000 gallons per acre in 24 hours, and the normal aggregate capacity of the units being installed at present is 25,000,000 gallons per day.

The water is first to be drawn from the intake well by low lift centrifugal pumps receiving just before entering the pumps the necessary coagulating solution. In this case it will be basic aluminum sulphate. On passing through these pumps the coagulant and water will become thoroughly mixed, after which it passes through the coagulating basin, when by means of suitable baffles, sufficient time will be afforded before filtration to render the coagulation of the water complete.

From the coagulating basin the water flows by gravity through the filter beds to the clear water basin beneath. The rate of filtration is governed by automatic controllers placed between the clear water basin and filters. From the clear water basin the filtered water flows by gravity to the high service pumps and thence is forced into the mains.

The plant at present is provided with 15 separate filter beds or units, which, with the capacity provided in the clear water basin, will afford sufficient flexibility to accomplish the necessary washing of the sand beds, without interruption to the supply of filtered

water. Provision is being made for the use of calcium hypochlorite in the effluent in case this treatment is found desirable. The plant is guaranteed to remove 98 per cent. of all bacteria without the hypochlorite, and practically all color, sediment and turbidity.

The walls and floor of the filter units, clear water basins, coagulating basins and lower parts of the machinery room, the floor of operating room, etc., are all reinforced concrete, and the superstructures are of brick with slate roofs; the buildings throughout are lined with buff pressed brick.

The plant has been designed by and is being erected under the supervision of Mr. Pitcher, the general manager and chief engineer of the Montreal Water and Power Company.

The plant is to be in charge of Mr. J. O. Meadows, at present sanitary engineer of the Provincial Board of Health. It is expected to make preliminary trials of the plant in about ten weeks.

The sessions of the Canadian Public Health Association came to a close with the election of officers and Executive Committee, as follows:—President, C. A. Hodgetts, M.D., Ottawa. Vice-Presidents, Dr. M. M. Seymour, Regina; Dr. J. W. S. McCullough, Toronto; E. B. Fisher, Fredericton. General Secretary, Major Lorne Drum, M.D., Permanent Army Corps, Ottawa; Treasurer, G. D. Porter, Toronto. Executive—Drs. P. H. Bryce, Ottawa; F. Montizambert, Ottawa; J. D. Page, Quebec; G. P. Lachapelle, Montreal; C. J. Hastings, Toronto; J. A. Murray, M. Can. Soc., C. E.; Chas. Douglas, Winnipeg; P. B. Fuston, M.R.; McKay, Saskatoon; T. Clark, Asso. M. Can. Soc., C. E., Saskatoon; C. I. Fagan, Victoria, B.C.; G. E. Duncan, Vernon, B.C.; Colonel Carleton Jones, M.R.C.S., Department of Militia and Defence, Ottawa; Drs. Smith Walker, Nova Scotia; E. O. Stevens, Moncton, N.B.; G. G. Melvin, St. John, N.B.; H. G. Johnson, Prince Edward Island; Jas. Warburton, P.E.I.; T. H. Whitelaw, Alberta, M.H.O., Calgary.

The next place of meeting will be Toronto.

Medicine

Graham Chambers, R. J. Dwyer, Goldwin Howland,
Geo. W. Ross, Wm. D. Young.

Oatmeal in Diabetes.

Of the various dietetic types of treatment suggested for diabetes in recent years probably none has aroused an equal degree of interest or remained in vogue to the same extent as the oatmeal "cure" introduced by von Noorden. Essentially this consists in feeding daily a mixture of 250 grams of oatmeal, 100 grams of protein, preferably of vegetable source, and 300 grams of butter, prepared in the form of a soup or porridge, at frequent intervals, along with an occasional allowance of beverages—cognac, wine, or black coffee.

Everyone acquainted with the history of the therapy of diabetes mellitus knows how warmly numerous drugs and procedures have been recommended and how disappointing these have generally been. Little reliance can be placed on any reports in which, as so often has been the case, the diet factors are imperfectly controlled; but aside from this, a marked temporary improvement and increased carbohydrate tolerance not infrequently follows the more careful attention to the details of diet and the habits of life; and the benefits are then falsely ascribed to some inconsequential accompaniment of the new routine. Despite all these considerations, it must be admitted at the present moment that there is a large body of clinical evidence indicating that even in severe cases of diabetes a considerably larger utilization of ingested carbohydrate is observed on an oatmeal régime than is the case with carbohydrates from other sources. It should be clearly emphasized that von Noorden himself pointed out that the oatmeal feeding is without influence in very many cases and may even be detrimental in some instances. It is more particularly indicated in glycosurias of the severe type, with attendant acetonuria.

Granting the validity of some of the reported evidence both from Europe and this country, the explanation of the good results achieved is far from apparent. Why should the utilization of starch by the diabetic become conspicuously favorable when this carbohydrate is derived from a special cereal, the oat? This pertinent question was debated by a number of the prominent European clinicians

at the last annual meeting of German internists in Wiesbaden. Several possibilities have been advanced and experimentally investigated. For example, oat starch may possess special chemical structural characteristics which render it unique and specific in this direction, in distinction from the starch of wheat or barley. This can by no means be regarded as evident from comparative feeding trials. It should be stated, however, that Magnus-Levy, among others, believes in a peculiar transformation of oat starch by micro-organisms in the alimentary canal, whereby it is converted into fermentation products rather than into simple sugars, as is ordinarily the case with starches. Naunyn early offered a similar explanation for the failure of oatmeal feeding to increase the sugar output in diabetics, by assuming that it is not utilized as sugar.

Other investigators have attributed the superiority of the oatmeal diet to some non-carbohydrate component in the cereal: but attempts to extract such an accessory product (perchance some enzyme, hormone, or anti-ketogenic compound) have not been very successful. Without denying for the present some specific virtue of the oatmeal itself, it seems as if the preponderance of present opinions is in favor of what may be termed the "negative" virtues of the dietary. By this we may understand the removal or lack of certain objectionable elements pertaining to the usual dietaries (meat and fats) which the oatmeal gruels replace. The latter are above all comparatively low in protein, with an abundance of fat amounting to as much as 2,500 calories (300 grams of butter). The reduction in protein metabolism and the incident replacement of animal by vegetable protein are quite in line with current tendencies and may offer an adequate explanation. It is essentially a fat-carbohydrate diet which is thus instituted.

The complicated nature of the matter is further evidenced by Minkowski's statement that the oatmeal diet is attended by a tendency towards retention of water and edema formation. Competent observers, such as Minkowski and His, incline to the belief that the conflicting views can best be reconciled by the assumption of more than one effective factor in the problem. It may not be amiss to remark that the possibility of a wide-spread employment of oatmeal in the diabetic dietary through layman's advice or careless advertising presents a danger which should be strenuously guarded against. The proper management of diabetes is characterized by an appropriate dietotherapy applied to individual cases. Every patient needs the conscientious advice of a competent observer.—*Editor J. A. M. A.*

Duodenal Ulcer. By J. P. Crozier Griffith, M.D., Philadelphia, Clinical Professor of the Diseases of Children in the University of Pennsylvania.

Duodenal ulcer in childhood is rare, although it is a cause of melena neonatorum, yet Collis, of Paris, found 42 occurrences below 10 years of age in a collection of 279 collected cases.

These two cases of Griffith's are, therefore, of interest and may be summarized as follows:

(1) A boy aged 10 was suddenly seized with faintness and dizziness in the morning and could hardly walk home. He vomited his dinner, and on the following day again ejected his stomach contents and also passed bloody stools, which recurred for several days, but unaccompanied by no abdominal pain, although slight distension was present. A relapse of the same condition occurred six months later.

(2) The second case was a baby boy of six months old, who had with difficulty been reared on modified milk, but with poor success, as vomiting frequently occurred. Vomiting of blood and melena suddenly occurred and the child died, when a post-mortem rendered the diagnosis proven.

Exophthalmic Goitre in Men. Pic and Bonnamour. (*Rev. de Méd.*)

This disease is rare in men, as the statistics collected by the authors of this paper show. Of 563 cases collected by Pic and Bonnamour from the literature, 109 were in men. No mention is made by the authors of the monograph by Buschan, who collected 980 cases from the literature, since which time up to 1903, 229 other cases had been published, making 1,209 in all, the ratio of men to women being as 1 to 4.6 (212 M—997F.).

Age.—Of the 109 cases collected by the authors, it is stated that the largest number occurred between 30 and 50 years of age, but the figures quoted by them show that the greatest number occur between 20 and 40, as follows: 24 cases between 20 and 30, 24 between 30 and 40, and 21 between 40 and 50. This also coincides with the 692 cases published by Buschan, and since that date by various authors, namely, 53 between 21 and 40. The authors state that in women, on the contrary, the disease is much more frequent in early life; the 692 cases mentioned above do not show this, as 325 of these occurred between 21 and 40, and the rest of the cases were divided over various ages up to 70. The authors only found

two cases at the extremes of life. Here again, a more extensive research into the literature would have found that 5 cases occurred before the age of 10, and 1 between 60 and 70.

Predisposing and exciting causes.—Nervous affections, epilepsy, hysteria, neurasthenia, have been frequently noticed in the ancestors. Mental and physical overstrain, emotions, fright have all been cited as predisposing causes. Infectious diseases, as rheumatism, typhoid fever, syphilis, tuberculosis, play the chief part as exciting causes.

Symptoms.—The authors lay stress chiefly on the most important symptoms met with in the male sex. The most frequent phenomenon is tachycardia. Palpitation is common, and tremors nearly always present. Goitre is also very frequent, and if unilateral, is more common on the right side than the left. The appetite is very poor as a rule, but sometimes there is bulimia. Attacks of diarrhea are common. Wasting frequently comes on early, and may be considerable. The most striking phenomenon in men is the presence of nervous symptoms: there is a marked state of unrest, excitability and irritability, the slightest noise is apt to excite him, and the smallest emotion immediately may provoke an outburst of anger. Ideas of persecution, hallucinations or even convulsions may occur. Exophthalmos may be entirely absent.

Prognosis.—The disease is much more rapid and the outlook much more serious than in women. Pneumonia frequently ushers in a fatal termination. The statistics quoted by the authors show the gravity of the disease very distinctly.

Pathogeny.—The authors suggest that, as has been shown, there is an antagonism between the ovary and the thyroid body; the cause of the gravity of the disease in the male sex is the absence of this antagonistic action.

Treatment.—Remedies appropriate to the disease should be employed early and actively, and if powerless for good, the authors recommend surgical intervention.—*Med. Chron. Abstract.*

Hookworm Disease. H. Gunn, San Francisco (*Journal A. M. A.*, September 30), in 1905 called attention to the fact that a large number of Porto Ricans were taking up residence in California, and that over 50 per cent. of them were hookworm carriers. No attention was paid to this at the time, but in 1910 the Public Health and Marine Hospital Service began to make examinations for this disease in San Francisco, and at the present time the importation at this port is prevented, though the country is open to the carriers

in other places. He refers to his already published article on the hookworm disease in mines, and says that during the last year several cases have been imported from Hawaii, which is not surprising, as the plantations there must have been badly infected by the numbers of Porto Ricans, Japanese and Chinese immigrant laborers. A recently established Bureau of Tropical Medicine, of which he has charge, has been investigating the matter, especially as regards Hawaii, and the results are given. In 171 cases there was found 15 per cent. of infection by hookworms, besides a considerable proportion of other parasites. He says that prevention of hookworm disease in California is a task of considerable magnitude, and will necessitate the examination of certain classes of immigrants and of a large proportion of the laborers now in the Alaska fisheries, when they return. Compulsory treatment also of the infected cases must be provided for. In dealing with the disease already existing in the State, the mines are especially important, and an examination should be made of every one in order to determine the extent of the infection. Mine officials should be educated as to the importance of hookworm disease, and mine sanitation and regulations should be promulgated and enforced, including the examination of employees, the treatment of infected persons, and mine sanitation. Mine officials have not given the subject their attention, unless it has been called to it, and in only one mine has any attempt been made to systematically examine the men and treat those needing it, and in this mine only twenty-nine have been examined, and 75 per cent. were found to be infected. For the scattered cases through the State, local sanitary measures will have to be depended on, but certain regions where Hindoos, Chinese, Mexicans, etc., are numerous should be specially considered. The only preventive measures mentioned are, as before stated, those carried on by the Federal Government, confined to San Francisco, and not covering a large class of people liable to introduce the disease.

CHOREA.

Charles (*Dublin Jour. of Med. Science*) prescribes rest in bed and all sensory stimuli excluded; isolation. The free use of trional is given to control the movements, and the general health should be improved by tonics and nutritious diet. Trional is strongly recommended; it produces sleep, controls the movements, and effects a rapid cure. He is not in favor of using the salicylate compounds.

Surgery

Walter McKeown, Herbert A. Bruce, W. J. O. Malloch, Wallace A. Scott, George Ewart Wilson.

Antityphoid Vaccination. Surgeon J. M. Phalen, U. S. A., New York (*Journal A. M. A.*, January 6).

Dr. Phalen describes the experience so far with antityphoid inoculation and the methods in use in the United States army. The vaccine employed is made by Dr. F. F. Russell in the laboratory of the Surgeon-General's office in Washington. The organism used is from an old culture that has ceased to be pathogenic and is sent out in sealed ampules containing 1 to 25 c.c. after having been thoroughly tested for bacteria and by inoculation into guinea-pigs. The immunizing dose is given in three injections at intervals of ten days: the first of 0.5 c.c., the second and third of 1 c.c. each. The injection is given with an ordinary hypodermic syringe into the deltoid muscle near its insertion. The site may be sterilized in any way, but with the large numbers treated at once in the military service, it is customary to paint the skin with tincture of iodine before the operation and touch the needle wound with it afterward. The reaction is usually not severe, and is comparable with the lighter cases of vaccinia following smallpox vaccination. It should not be given to persons with any illness or to the aged or debilitated, and a case has been reported of latent tuberculosis incited by it. Russell estimates the percentage of very severe reactions at 0.1 per cent., and attributes them to the introduction of the vaccine into a large vein. At first a voluntary measure, typhoid immunization has been made compulsory in the United States army for all officers and men not over 45 years of age who have not had an authenticated case of typhoid fever. About 60,000 men have completed the three inoculations. At the barracks where Dr. Phalen has been recently stationed, each recruit is vaccinated against smallpox and given the first antityphoid inoculation on enlistment. At the time of the second inoculation many men are suffering from vaccinia, and the reactions are frequently more severe, though quite transient. With this rather unavoidable exception, the inoculations are not given to anyone in any way out of health. Phalen gives a history of the use of antityphoid inoculation in armies, and says that nowhere do we

get so convincing evidence as in our own army experience. In the 60,000 men who have been inoculated there have been but twelve cases of typhoid and no deaths, and the typhoid-rate is only one-sixth as great in the inoculated as in the uninoculated. One man in the Guantanamo Naval Station died five days after his first inoculation from a case of walking typhoid, but this is the only case of the death of an inoculated man from typhoid in the government service. Among the nearly 13,000 soldiers near San Antonio there was only one mild case of typhoid, while forty-nine cases with nineteen deaths occurred in San Antonio in the city population. As regards paratyphoids, these are presumably not affected by antityphoid inoculations, though clinically they are similar, and, if the proportion of paratyphoid cases is high, the results may be a little disappointing. Possibly a mixed typhoid and paratyphoid vaccine might be indicated. The duration of immunity is not yet settled, but Firth estimates it from British data at thirty months. Leishman thinks the reinoculation should be given after two years. In the United States army, with its three-year enlistment period, the rule is for inoculation to be given at each enlistment. Further experience is needed as to this point. The treatment of actual typhoid by inoculation is still in the experimental stage, but the opinions deduced from experience are altogether favorable. It shortens the period of fever and total duration of the disease and markedly reduces complications and relapses. The mortality, as deduced from the reported cases available, is found by Phalen to be 4.9 per cent., and all agree that it does no harm, even where it does no good. The dosage is increasing and the results appear to be better. In the treatment, however, the vaccine has yet to definitely prove its full value.

SPINAL MENINGOCELE.

J. A. M. A. says Morton's fluid, which was formerly used by injection for the cure of spinal meningocele, is made up as follows: Iodine, grs. 10; potassium iodide, grs. 30; glycerine, ounce one. After the sac was cleaned, chloroform was administered, the child lying on its side, a fine trocar was plunged obliquely in at the side through sound skin, little or no fluid being drawn off. Then one drachm of the Morton fluid was injected. The trocar was withdrawn and the puncture sealed with a bit of gauze and iodoform collodion.

Reviews

Dorland's American Illustrated Medical Dictionary. The new (6th) edition revised. A new and complete dictionary of terms used in medicine, surgery, dentistry, pharmacy, chemistry, veterinary medicine, nursing, biology and kindred branches, with new and elaborate tables. Sixth revised edition. Edited by W. A. Newman Dorland, M.D. Large octavo of 986 pages, with 323 illustrations, 119 in colors. Containing over 7,000 more terms than the previous edition. Philadelphia and London: W. B. Saunders Company, 1911. Sole Canadian agents, The J. F. Hartz Co., Ltd., Toronto. Flexible leather, $4.50 net; thumb indexed, $5.00 net.

This dictionary is quite complete and yet concise, covering thoroughly all branches of the study and practice of medicine and surgery. One of the numerous pleasing features is the short biographies of "Masters of Medicine." It is a book well worthy of a position in our libraries. J. H. T.

Special Western Number.

In furthering the plan of producing special issues of the *American Journal of Surgery*, composed of contributions by surgeons residing within a certain geographical area, yet of international reputation, there will be issued, in the early part of 1912, a special western number of this magazine. Subjects and those to contribute:

"The Operation of Gastroenterostomy," by William J. Mayo, Rochester, Minn.

"The Surgery of Tendons," by John B. Murphy, Chicago, Ill.

"Operative Treatment for Graves' Disease," by George W. Crile, Cleveland, Ohio.

"Colonic Intoxication." by J. E. Binney, Kansas City, Mo.

"Practical Points in the Surgical Treatment of Exophthalmic Goitre," by A. J. Ochsner, Chicago, Ill.

"Treatment of Foreign Bodies in the Esophagus," by E. Fletcher Ingals, Chicago, Ill.

"Brain Surgery Technique," by J. Rilus Eastman, Indianapolis, Ind.

"Treatment of Abscesses and of the Necrotic Foci Resulting from the Use of Salvarsan," by A. Ravolgi, Cincinnati, Ohio.

"Treatment of Prostatic Obstructions," by E. O. Smith, Cincinnati, Ohio.

Subject not announced, H. Tuholske, St. Louis, Mo.

"Artificial Tendons and Ligaments in the Surgical Treatment of Paralysis," by Nathaniel Allison, St. Louis, Mo.

"Uterine Cancer," by John C. Murphy, St. Louis, Mo.

"Arthritis Deformans," by Leonard W. Ely, Denver, Col.

"Acute Angulation and Flexure of the Sigmoid, as a Causative Factor in Epilepsy, with Special Reference to Treatment," by W. H. Axtell, Bellingham, Wash.

The character of contributions prepared by these well-known surgeons are of such a nature as to make this number particularly interesting.

The Care of Infants and Young Children. By A. Dingwall Fordyce, M.D., F.R.C.P. (Ed.), Extra Physician, Royal Edinburgh Hospital for Sick Children. With thirty-six illustrations. Price 1s. 6d. net, or in cloth covers 2s. net. Edinburgh: E. & S. Livingstone.

Those responsible for the care of children, or who, like physicians and nurses, are in the position of advisers, will find in these compiled lectures a practical handbook which they need have no hesitation in recommending to mothers, health students, etc. Nurses themselves, as well as medical students, may read and study it with profit and pass it, or the knowledge gained, along to those in daily need of some enlightening information of this character.

International Clinics. Volume IV. Twenty-first series, 1911. Philadelphia and London: J. B. Lippincott Company.

Canadian practitioners who require—and we think all do—a practical, useful, modern and up-to-date exposition of the advances in all branches of medical science, cannot do better than become subscribers to *International Clinics.* Volume IV. completes the twenty-first series, ending the year 1911. The frontispiece is a picture of Edward Jenner. There are five articles on treatment; two on geriatries; three on diagnosis; four on medicine; three on surgery; one—otology; one—pediatrics; one—ophthalmology; one—medico-legal; two—economics of medicine; one—history of medi-

cine. The article on the Successful Practice of Medicine by Thomas F. Reilly, Fordham University, New York, is well worth perusal and study by all. Canadians will also be interested by the article—"On Habit, Symptoms and Disease," by Professor J. George Adami, McGill University. Copies and subscriptions can be ordered and placed through the Canadian agent of Lippincott's, Mr. Charles Roberts, 608 Lindsay Building, Montreal.

The Physician's Visiting List—1912. Philadelphia: P. Blackiston's Son & Co.

This is the sixty-first year of this handsome pocket visiting list. The contents of the book are: calendar 1912-1913, a new complete table for calculating the period of utero-gestation, table of signs, incompatibility, poisoning, the metric or French decimal system of weights and measures, table for converting apothecaries' weights and measures into grams, dose table, quarantine periods in infectious diseases, asphyxia and opnoea, comparison of thermometers. Then follow the blank pages for accounts, memoranda, etc.

Text-Book of Gynecological Surgery. By Comyns Berkeley, M.A., M.D., F.R.C.P., M.R.C.S., Gynecologist and Obstetrician to the Middlesex Hospital, London, and Victor Bonney, M.S., M.D., F.R.C.S., M.R.C.P., Assistant Gynecologist and Assistant Obstetrician to the Middlesex Hospital, London. 720 pages, 392 figures in the text from drawings by Victor Bonner, and 16 colored plates. 1911. $6.00. London: Cassell & Co. Toronto: D. T. McAnish & Co.

In a review of this work one is at once struck with its essential completeness, its simplicity, and accuracy of detail. Dealing, as it does, with operative gynecology, and coming from two of London's best known and most practical gynecological surgeons, and being brief, concise and full of useful information, it cannot fail to arouse the interest and enthusiasm of its readers. The plates are of a superior kind, and the illustrative drawings are all that could be desired to display very clearly the methods of procedure in various operations. During a considerable period from ten to fifteen years ago Dr. Berkeley was well known to many Canadian graduates in medicine studying abroad as the best "coach" in London on the subjects of gynecology and obstetrics, and it was due to his untiring

efforts that many of them were able to pass with credit to themselves the examination of the Conjoint Board in these subjects. It will be a source of much gratification to his many former students to be able to acquire this splendid production. There is no other small, readable book that deals more clearly or more usefully with its subject. F. W. M.

International Clinics. Edited by Henry W. Cattell, A.M., M.D. Volume III. Twenty-first series. 1911. Philadelphia and London: J. B. Lippincott Company.

It is the rule for articles appearing in this well-known quarterly to be the best obtainable from the pens of the very best men in all departments of medicine. This volume continues as good as any of its predecessors. Many branches are treated of in the twenty-two papers contained in the present volume. Dr. Thomas F. Reilly has a splendid article, "The Successful Practice of Medicine." Another which will appeal to most men is "Economic Conditions Affecting Physicians," by H. B. Allyn. Anyone desiring to subscribe to this quarterly, which is issued four times a year, and bound in cloth boards, may do so through the Canadian agent of Lippincotts, Mr. Charles Roberts, 608 Lindsay Building, Montreal, Canada. The subscription price is $2.00 a volume. Each number is far worth the money invested. We heartily recommend it to all.

Dominion Medical Monthly

And Ontario Medical Journal

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COMMENT FROM MONTH TO MONTH.

The division of professional fees, fee-splitting, "dichotomy," or whatever it may be called, was an instructive, interesting and important subject for discussion at the Academy of Medicine, Toronto, the evening of the 2nd of January.

The following is the resolution presented:

(a) That the secret division of a fee, or fees, with any person, or persons, who may be influential in influencing a patient, or patients, to apply for operative care or professional advice, is unworthy of any member of the medical profession.

(b) That if such a division of fee is made by a member of the Academy of Medicine, Toronto, it should be counted as sufficient ground for the expulsion of the member.

(c) That it shall be the duty of the Council of the Academy to investigate charges against members made on the basis of such division of fee; and on proof of offence the Council may either permit the resignation of the person or expel him from the Academy.

Before entering upon a discussion of this controversial question, one probably of the most momentous importance to the profession at large appearing on the medical horizon for years, it will suffice for the present to state that the resolution was not finally acted upon at the meeting, but that it was referred to a special committee for a report, when another discussion will take place.

The after-effects of the holiday season may have had something to do with the very slim attendance at the meeting, for announcements had been sent to members of the Academy a week or ten days before. Failing this as a reason, is it to be understood that the profession as a body is not well seized of the fact that this dichotomous practice has invaded, and even gained considerable foothold in, the county, state and national medical life of our neighbors to the south of us? Or is the profession supine in the matter, that is, mentally and morally inert?

Whilst it is understood that the practice has appeared in our midst, it cannot be said to have gained any particular headway. The discussion, however, proves that there is a feeling of unrest and a dissatisfaction with the present relationship between physician and operator.

It is well to introduce early into the discussions on fee-splitting, in order to put special and emphatic stress upon the subject, that the monetary consideration, the mere matter of dollars and cents, is not the totality of the questionable innovation. There is the moral side, which may have diversified aspects, and not the least of these is the right or wrong of paying a secret commission.

In the sister profession of law, when the solicitor engages special counsel, both charge their respective fees to the client—and all is open and above board. There is no paying on the part of the counsel moneys to the solicitor, out of the former's retainer. Both stay with the case to its finish. And that is exactly where the difference lies, for it is not so with the physician and surgeon. In the majority of cases the physician relinquishes the patient to his brother of the scalpel.

Life and restored health should be important enough to demand that both continue their services hand-in-hand to the close of the case. Then the sum total for their services could, and should, be amicably adjusted; twenty per cent., forty per cent., fifty, or whatever it should be.

Nothing is more evident in life than that there are two sides to a question. All history testifies thereto. There is no need of cudgelling this into any intelligence, be it never so backward. Your enthusiast, who, in this case, may be set down as the surgeon fighting vehemently against the introduction of this rash innovation, will not see it so; and he will probably din it into our ears that it has only one possible solution, namely, thug it to death. In the meanwhile, the neophyte in the practice, quiet, uninfluential, may be steadily at work practising and preaching the gospel of this new evangel,—for it may be good news to general practitioner, beginner,

the old man side-tracked in the race, and the budding surgeon alike.

It remains to enumerate some of the causes which have brought the question of the division of fees into medical life. The increased cost of living is said to be a potent factor; some one says overcrowding is responsible; too many medical schools, cries a third; too low standards; too many specialists; the man in general practice doing special and other surgical work; the young surgeon fighting for his life and his living; the closed hospital; because others are doing it.

The prime question, however, is, is it right or wrong? Because it is a secret process between physician and operator, it is unbecoming to the ethical profession. This is the chief condemnatory argument. But consultations are secret, as all that takes place in the consulting-room is not divulged to either patient or friends.

The whole question is one which demands the most careful and serious consideration on the part of the Academy of Medicine, or any other medical body, before any such drastic therapy as expulsion be applied. If perchance a majority of the Academy favored the division-of-fee system, and entered a somewhat similar resolution calling for the expulsion of those who did not adopt it, what would happen?

The supervising medical editor on the staffs of the leading dailies has come. Many years ago, and several times since, we predicted this departure in newspaper work, and, indeed, advocated the medical editor in connection with the newspaper, not alone in the interests of justice to medical science, but as well to the public, who, if they were athirst for information of a scientific character of this description, should get it from a competent source, and not have it served hot from the juvenile pen of some "kid" reporter.

If the newspaper of the future is to be the great medium for the dissemination of knowledge regarding public medicine, which more and more is becoming appetizing reading for its patrons, it must of necessity recognize the great importance of the medical editor to supervise all items of even a medical coloring, as well as to edit and prepare such articles as shall correctly impart exact knowledge and teach the people aright.

The Chicago *Tribune* and the New York *Herald* are the two foremost pioneers in this new field, and both have recently engaged competent medical editors on their respective staffs. There are others which have for some few years employed the medical editor

tentatively, but these are the first to make him a necessary figure in the editorial sanctum.

The advisability of issuing a special journal to the public has been under consideration by the American Medical Association; and in England, a large newspaper syndicate is preparing to issue some such publication, which shall be edited, and contributed to, by members of the medical profession.

We in Canada are a community of excellent copyists; and it will probably not be long before some of our leading dailies will be seized with a desire to follow suit. And, indeed, there is plenty of evidence, every now and again, that such a supervising editor is urgently demanded.

The desire to serve the public is generally evidenced by the increment of dollars and cents. Once satisfied that there is money in the venture; that it is a matter of business as well as one of education; that accurate news of public medicine and its subsidiaries, preventive medicine, sanitary science, quarantine, school hygiene, the medical supervision of school children, etc., etc., is a producer for the newspaper, and effects sales, the newspaper directorate will act, and act quickly.

As we wrote last month, the newspaper is bound to become the great medium in educating the people in all which affects the conservation of human life and human health. That granted, the medical editor is obviously and absolutely essential.

Annual life insurance examinations, according to statements by the officers of some companies, will soon become part of the ordinary business routine of life insurance work.

The life insurance companies, from a business standpoint, are alive to the great opportunities for saving, and thus increasing dividends, through taking advantage of the teachings of preventive medicine.

With a disinterestedness almost marvellous, the medical man has always taken keen action in the prevention of disease.

If annual medical examinations in life insurance, old-line life and fraternal, become practice, it will be the first instance of the profession advocating something in preventive medicine, which will redound to their own financial gain.

It will be in accord and keeping with all the medical profession has done in the past in preventing disease, for the profession now to as earnestly advocate the annual medical examinations of all policy-holders.

Satisfied that it is in their own interests, as well as in the interests of the insured, and that these examinations are something more than mere measures in preventive medicine, the companies may be depended upon to push forward the movement, and, adopted by some, it will soon become universal.

Like as in establishing sanatoria for diseased policy-holders, the fraternal societies will follow suit; and alive as is the intelligent and educated portion of the community to-day to the advantages accruing from preventive health measures, they will offer little resistance to these annual examinations, but rather welcome them, recognizing, as time goes on, the importance of the regularity of being reassured by a physician that their physical well-being is normal. So also will they appreciate the fact that it is only by this means that insidious diseases may be soon recognized and treated.

The life insurance medical man is thus destined to fill an ever-increasing sphere of usefulness in the community.

DR. CHARLES E. de M. SAJOUS.

Supervising Editor of the New York Medical Journal.

We have the honor to announce that beginning with issue of December 9, 1911, Dr. Charles E. de M. Sajous, of Philadelphia, becomes the Supervising Editor of the *New York Medical Journal*. While Doctor Sajous will give up his private visiting practice, he will continue his work as a consulting physician, investigator, teacher, and author, and thus be in a position to keep in the closest touch with the needs of the medical profession.

Though born under the American flag, Doctor Sajous received his preliminary education in France. He studied medicine in Philadelphia, graduating with honors from the Jefferson Medical College in 1878. He served for two years as resident physician in the Howard Hospital, and in 1881 was appointed Professor of Anatomy and Physiology in the Wagner Institute of Science, Lecturer in the Philadelphia School of Anatomy, and Clinical Assistant in the laryngological department of Jefferson Medical College, succeeding Dr. J. Solis-Cohen, in 1883, as Clinical Lecturer and chief of that department. In 1891 Doctor Sajous went to Paris, where he devoted six years to original research. Upon his return, he was appointed Dean of the Medico-Chirurgical College. At the recent reorganization of the medical department of Temple University

Doctor Sajous accepted the Chair of Pharmacology and Therapeutics, which he still holds.

The immediate outcome of Doctor Sajous's six years of research work in Paris was the publication of two volumes on *Internal Secretions and the Principles of Medicine*, a work which gave the author high standing as an original investigator.

Doctor Sajous has had a wide editorial experience, having founded, in 1888, the *Annual of the Universal Medical Sciences*, which he conducted with the collaboration of some of the most eminent physicians in America and Europe, until the publication was abandoned in 1893. The *Annual* had a circulation of over 500,000 volumes and the *Cyclopaedia of Practical Medicine*, founded by Doctor Sajous in 1898, to succeed the *Annual*, and intended more particularly for the general practitioner, has attained a circulation of 240,000 volumes, the seventh edition being now in course of preparation.

The value of Dr. Sajous's services to medical science has been recognized in France by his being made a member of the Legion of Honor, while in Belgium he received the Order of Leopold and was made a Knight Commander of the Liberator, besides receiving other titles, both governmental and scientific. In America Doctor Sajous has been president and vice-president of many societies and is a Fellow of the College of Physicians of Philadelphia and of the American Philosophical Society. He brings to bear on the editorial problems of the *New York Medical Journal* a brilliant and well-informed mind, wide experience, and a thorough knowledge of the needs of the American physician.

The publishers of the *New York Medical Journal* feel that they as well as its readers are to be congratulated upon having obtained the services of Doctor Sajous. Comprehensive and well-directed plans have been formulated for enhancing the value and interest of the *New York Medical Journal*, and in carrying out these plans no pains or expense will be spared to give to its readers a medical journal of unprecedented authority and interest.

News Items

Dr. Harry Pearson has moved from Stayner, Ont., to Toronto.

Dr. G. R. McDonagh, Toronto, left for the South on the 11th of January.

Sarnia, Ontario, has had a small epidemic of typhoid fever, there having been upwards of one hundred cases.

Two good, unopposed medical practices for sale cheap in Alberta. One has a drug store. For further particulars apply to us.

Dr. Bruce Hewson has sold his practice in Colborne, and for the last three months has been doing special work in New York hospitals.

The *Journal of the American Medical Association* noted 2,145 deaths amongst physicians in the United States and Canada during 1911.

Dr. Chas H. Mayo was recently operated on in New York for appendicitis, and subsequently for gall stones. He is understood to be recovering nicely from both.

Dr. S. H. Westman, Toronto, died the 30th of December, 1911 of acute Bright's disease. He was 39 years of age, attached to the medical department of Toronto University and also to the Toronto General Hospital. Dr. Westman was exceedingly well liked by his confreres, and his early demise is deplored by all.

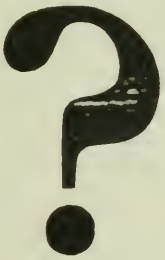
A new private hospital—the Madison—has been established at 159 Madison Avenue, Toronto. The rooms are sunny and bright, the operating room being exceptionally nice and complete. The charges are quite moderate. The Madison is in charge of two experienced and capable trained nurses—Miss Agnes Chisholm and Miss Elizabeth F. Sinclair. Telephone College 8599.

Ontario is to be divided into health districts, the old municipal boards of health to the number of 800 are to be abolished, and each district is to be placed under charge of an experienced medical man responsible to the chief health officer of the Province. It is not intended to interfere with the Boards of Health of the larger cities.

The Western Hospital, Toronto, held its annual meeting. The yearly revenue easily met the current expenses. About $200,000 is needed for equipment of the new wing nearing completion. Then the Western will be one of the best hospitals in Ontario.

Publishers' Department

Important New Preparations of Parke, Davis & Co.—General practitioners will be interested in the announcement by Parke, Davis & Co. of two new products of their chemical laboratories. Proposote and Stearosan are the names chosen to designate the preparations in question. Proposote is creosote in combination with phenyl-propionic acid. It is a straw-colored, oily liquid, neutral in reaction, nearly odorless, and having a slightly bitter taste suggestive of creosote. It is insoluble in water, but is slowly decomposed by alkaline liquids. The indications for it are the same as those for creosote. Tubercular cough following pneumonia, the cough of pulmonary tuberculosis, acute and chronic bronchitis, purulent bronchitis, abscess of the lung, asthma, and bronchitis complicated with Bright's disease are among the pathological conditions benefited by its administration. Being insoluble in acid media, it passes through the stomach unaltered by the gastric juice, to be slowly broken up by the alkaline fluids of the small intestine, hence may be given in gradually increasing doses until the desired effect is obtained. During prolonged administration, as is well known, creosote disturbs digestion, impairs the appetite, and often causes nausea and vomiting. Proposote is free from this objection. Stearosan is santalol combined with stearic acid. It is an odorless, tasteless, light-yellow oily liquid that is insoluble in water and dilute acids, but is slowly broken up by alkaline fluids. The pathological conditions in which it may be employed with advantage are precisely those in which santal oil has long been used—chronic gonorrhea, cystitis, urethritis, vaginitis, pulmonary disorders, such as chronic bronchitis, bronchorrhea, etc. It possesses therapeutic properties fully equal to those of santal oil, over which it has the important advantage of being practically without irritating effect upon the stomach. The explanation of the latter fact is that the preparation is not attacked by the acid gastric juice, but passes into the small intestine, where it is broken up or emulsified by the alkaline fluid and absorbed without difficulty. The distressing eructations and loss of appetite attendant upon the administration of santal oil do not occur when Stearosan is given. Both Proposote and Stearosan were thoroughly tested clinically before being offered to the medical profession, and practitioners may be assured of their therapeutic efficacy in all cases in which they are indicated. They are supplied in 10-minim elastic gelatine capsules, boxes of 12, 24 and 100, and may be obtained through retail druggists generally.



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Frosst's Perfected Blaud Capsules present True Ferrous Carbonate.

Each 10 grain Capsule contains, approximately, 1 grain of Iron.

Charles E. Frosst & Co., Montreal.

Progress of Fashion-Craft Clothes in Toronto—Another Link in the Dunfield-Bellinger Chain—Three Progressive Men's Wear Stores, the Younger of Which was Opened Recently.—The opening recently of a third Dunfield & Bellinger store in the city of Toronto brings into prominence a notable instance of development in men's wear merchandising. Whilst to all outward appearance the men's furnishing and clothing section in these stores

appear to be run by one company, such is not the case. Messrs. Dunfield & Co. control all that pertains to the haberdashery departments, whilst P. Bellinger is proprietor of the three Fashion-Craft clothes departments.

By such means a saving in rent and overhead expenses is made, whilst under one roof may be found every requisite for the well-dressed man, purchased and displayed by men who thoroughly

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understand their business in either the clothing or furnishing department.

A little over one year ago Messrs. Dunfield & Co. occupied a men's furnishing store on Yonge Street, whilst P. Bellinger owned and operated an exclusive shop of Fashion-Craft on King Street. By mutual agreement Messrs. Dunfield & Bellinger came together and the results of placing their interests, as far as occupation of space being decided upon, and proved so satisfactory that a third premises was obtained and opened in September, situated on the corner of Buchanan and Yonge Streets. This store is under the management of Chas. T. Sargeant for Messrs. Dunfield & Co. and Stewart Price for Fashion-Craft.

The King Street store is managed by Mr. Bellinger, with Glen S. Case operating the furnishing department. In the third store, No. 102 Yonge Street, Mr. Gordon Dunfield takes the general managership of their system, whilst Herb. A. Irving acceptably fills the post of manager in the clothing department.

A proud boast of Messrs. Dunfield & Co. is that less than twelve years ago their sales did not amount to $6,000 for the year, while to-day thirty times that amount would be more like their annual output.

Mr. Bellinger, who has been connected with Fashion-Craft ever since it started, claims that to-day he is doing more business in his original store than he ever did before, and yet his second store's turnover is larger, whilst his hopes for his third venture, if realized, will place him in the enviable position of leading retail clothier in Canada.

Medical practice for sale; fifty miles north from Toronto; railway station three miles; very nice property and several lots; unopposed; good country and roads. Price $3,000, $500 down, balance arranged. Collections about $3,000 per annum. Apply to us.

The International Hygiene Exhibition.—Grand Prix awarded to manufacturers of Sanatogen and Formamint.—The worth of a "grand prix" depends chiefly upon the character of the exhibition which awards it. In the case of the International Hygiene Exhibition at Dresden—under the patronage of H.M. the King of Saxony—the honor is a genuine one, and represents the highest medical opinion in Europe. It is interesting to note, therefore, that the only Grand Prix awarded in the pharmaceutical section at this

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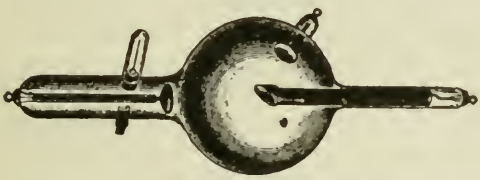

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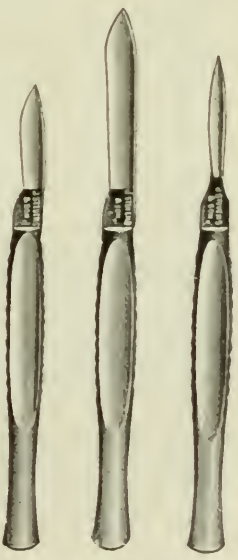

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exhibition has been received, against numerous competitors, by Messrs. A. Wulfing & Co., manufacturers of the well-known preparations, Sanatogen, Formamint and Albulactin. The British Section, under the patronage of H.R.H. Princess Christian, was organized by the Lord Mayor of London, Sir Vesey Strong, and played a prominent part at the Exhibition, where all the leading nations were officially represented.

Face massage, scalp treatments, body massage, needle sprays, colored light baths and electrical massage are now essentially required as efficient adjuncts to the medical man's armentarium. Where experience and skill in administering such treatments are assured, it is very satisfactory to the practitioner who has to refer cases for treatment under special supervision to know such will be conducted efficiently and intelligently. Toronto or out-of-town medical men will know that well-appointed parlors and sun room have quite recently been opened in this city. These are in charge of and under the personal supervision of Mrs. Neil MacKinnon, late of Scotland. The institution is conveniently and centrally located at 20 Walmer Road.

James J. Putnam and C. J. Blake, following Babinski's observations, report favorably upon the withdrawal of from 15 to 22 c.c. of cerebral spinal fluid by lumbar puncture in aural vertigo. In some cases the results have been immediately favorable, and only occasionally has a second puncture been required. No untoward results have been observed excepting headache, lasting from a few days up to a week.

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H. G. Hughes (*N. Y. M. J.*) says the urine of a pneumonia patient shows almost constantly absence of sodium chloride. Potassium nitrate in full doses causes the sodium chloride to reappear in the urine within a few hours, and as long as it is given the chloride will continue present. He states the effect upon the course of the pneumonia is seen in the fall of temperature in a few hours, and that it continues to drop until normal is reached. The physical signs remain for a few days, and resolution and recovery is brought about without crisis.

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What is Best in Tonics?—Many people, and perhaps a few physicians, are inclined to consider the terms "tonic" and "stimulant" as more or less synonymous and interchangeable. This, of course, is not the case, although some agents employed medicinally may partake of the properties of both and be properly known as "tono-stimulants." Strychnia, for instance, is a heart stimulant, but may also be considered as a general nerve and systemic tonic when given in small and frequently repeated doses. While a stimulant alone is sometimes indicated in conditions of emergency, its long continuance almost certainly produces an after depression. It is sometimes advisable, however, to give stimulant and tonic together in conditions of serious general depression, the first to "boost" the vitality and the second to hold it at the point to which it has been raised and to restore the general tone of the organism. An ideal combination of this nature is Pepto-Mangan (Gude), to which has been added the proper dose of strychnia, according to indications. This combination is especially serviceable in the convalescence of exhausting diseases such as typhoid fever, pneumonia, la grippe, etc. It is also of much value when the heart needs support and the general system requires upbuilding. Pepto-Mangan restores vitality to the blood by increasing the number of red cells and the percentage of hemoglobin, and the strychnia assists in rendering the combination a peculiarly efficient general bracer and permanent reconstituent.

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This consists of raw, lean meat, dried and dessicated. Can be given on thin bread and butter as an ordinary potted meat or mixed with milk or any other liquid as the doctor may advise. Valuable for children and others suffering from flaccid muscles, weak digestion, etc. Is also valuable as a constituent of nutrient enemata.

Dominion Medical Monthly

And Ontario Medical Journal

Vol. XXXVIII. TORONTO, MARCH, 1912. No. 3

Original Articles

THE FRESHMEN'S FIGHT.

By A. C. E.

The old medical building of the College of Physicians and Surgeons of T——, consisted of two classrooms, primary and final, a faculty room, small museum, and a cloak-room in the basement.

The freshmen and sophomores together received lectures in the primary room; the third and fourth years in the final. The primary room was at the side of the short main hall; the final at the end.

At the beginning of term, generally the first Tuesday in October, the day was set apart for the opening lecture, after which the Dean would give the usual announcement: "The regular lectures will commence at 8 o'clock to-morrow morning."

It was always at the close of the first afternoon lecture—4.30 following the opening day—that the sophomores gathered their forces for the freshmen initiation ceremonies in the primary room. This was the first haze.

The janitor had rung the "out" bell, and the professor had immediately gathered up his notes and swung out through the hall into the faculty room.

Instantly there was a buzz and a hum. The fun had started.

The sophomores have doffed their coats, collars, neckties, all, anything, everything which is likely to incommode them. Some have even stripped to their undershirts. These are passed from hand to hand till all have found their way in safety to the quiet domain of the final apartment.

Perched upon the great cross-beams, yelling, cheering, shouting, in windows, everywhere, to be safe from the terrific avalanche, the two final years urge on the battle.

The freshmen, many of them with white faces, nervous, breaths bated, have gathered in groups amongst the upper seats and on the upper landing, away up nearly to the ceiling of the amphitheatre-like classroom. All is new to them, so new that they wonder to themselves where it will all end. Some stand with hands in pockets awaiting for the onslaught. No organization—none; there has been no time for anything like that. They have not even made acquaintance one with another. All are strangers, but they congregate now, drawn together by a common sympathy of dread and danger. The passageway up the centre between the rows of seats is cleared; so is the space in front and around the dais, for here often lies the fun. *Here* the freshmen very often fight, resisting elevation.

Two sophomores, Jack Felcher and Archibald MacMahon, are rampant. They line a double row up one side over the seats or benches. They muster a force upon the opposite side. One gang brings them down; the other hauls them up.

John Ditchfield, a third sophomore, stripped to the waist, nothing upon his powerful frame but under-guernsey and pantaloons, stands at the bottom of the elevating detachment. He is supported by six or eight stout, burly fellows. These are noted "scrappers," and this is the point where fight is always shown. Felcher and MacMahon will lead on the first assault.

Everything is now in readiness. The men are marshalled into order. The command is given. Away they go, scrambling up over the seats and partitions, some few up the aisle, all the attacking party making for the group of freshmen huddled upon the upper landing.

Felcher is a little fellow, but he is first. He is met with a rebuff which almost completely deprives him of his hazing ardor. A big freshman from the Prairie Province, tanned, brown, and rugged with his rough, outdoor life and toil, has grabbed the little hazer and has literally thrown him in the faces of the advancing party. He strikes MacMahon, a long, lanky soph., full in the chest, and over they both go, all tangled up, between two rows of seats.

A yell of delight goes up from the jubilant finals at this reception. It means there is going to be some fight and lots of fun for them. It is a time-honored custom. The sophomores must fight their own battle. They will get no assistance from the finals. Cheer upon cheer rises from their throats, and the freshmen are encouraged on, but, timid, they hold back from coming up to the support of their fellow. The rush is now upon them. Felcher and MacMahon have extricated themselves from their ludicrous predica-

ment, being unmercifully guyed and jeered by the unfeeling finals. The small group of freshmen on the right are making a good fight.

"Cross over, 'Freshie,' and help your men!" cry the finals, eager now to see the sophs defeated. But the freshmen lack courage. They have not yet begun to understand the meaning of the affair, nor what shape it is to take.

Several of the lines of "elevators" have left their places and gone over to the right to reinforce the attacking party.

Now they come, one by one. By sheer force, each freshman is dragged down over the partitions (book-rests between the rows of seats), by a gang of five or six to the floor below, where some give up and go up on the other side without any fuss or kicking, being given a good start by the powerful arms of John Ditchfield.

MacMahon and Felcher are doing very little real fighting. They are both standing upon the top of one of the partitions directing the manoeuvres. MacMahon, from his height, espies a little, oily, Jew freshman, Oliver Oppenheimer by name, and he leans over to reach him; but that slippery individual eludes his grasp and slides away up out of his reach. With a coarse epithet, MacMahon dashes after him and catches him as he is about to glide down one of the long stovepipes which run, one on either side, up over the seats from the stoves on the floor below. Oliver turns and bites his fingers as they rest on his forearm. MacMahon gives a howl of pain and suddenly releases his hold. The Jew, who appears to be endowed with wonderful agility, jumps suddenly upon the shoulder of one of the freshmen, grabs the iron bar which holds the south wall of the room from parting with the north, swings himself up, and then shins away up to the ceiling on one of its supports, writhing and twisting his body around the rod, looking for all the world like a good-sized monkey.

This episode amuses the finals immensely, and they laugh at and joke MacMahon accordingly, daring him to bring the agile "freshie" down, as he is elevated altogether too far up.

The fight still goes on. All are not down. All have not gone up over the bar. It has taken no little trouble to bring down the strong young man from the West. About a dozen have managed at last to land him on the floor below, where he is handed over to the tender mercies of John Ditchfield and his gang. He makes a little resistance even here, but the brawny arms of big John encircle his waist; his legs are grabbed by four or five others; he is lifted bodily off his feet; a great shove from John, and up he starts. Once free of that powerful grasp, he starts at resistance again. He kicks out vigorously. Someone gets a stunner in the chest. "Saw

him! Saw him!" goes the cry. John runs up one or two rows. His satellites follow. Three or four are placed at a leg, the same at the other, and at each arm. Then these dozen or more strong fellows proceed to administer what is very severe punishment. He is jerked in one way, then in the opposite direction, alternately arm and opposite leg, until the poor fellow has his extremities almost evulsed, until he is almost quartered by these fiendish fellows. He is then carried up and thrown over the last row to regain his breath amongst his freshmen associates, a much sadder and a much wiser man. What availeth one against a dozen?

All dripping with perspiration, warm, puffing and blowing, tattered and torn, the sophomores stand wiping their necks and faces free from the product of their exertions.

The door suddenly opens and in walks the tall and handsome form of George Bolingbrooke, a young man who had attracted a great deal of attention at the opening lecture of the term the day previous.

A small wavering cheer from the freshmen greeted his appearance, for was not here a champion and a leader for them.

The finals gave him a hearty reception. Here would be some grand sport in elevating this one. Cheer after cheer went up; shout after shout arose.

The sophs stood looking at Felcher and MacMahon.

Felcher and MacMahon turned their eyes upon Ditchfield.

"Hurrah, boys!" cry Felcher and MacMahon, as they rush for the big fellow.

Ditchfield and his gang follow.

The finals shout for the "freshies" to come down and help their man; but there is no need.

George Bolingbrooke folds his arms across his expansive breast as he feels John Ditchfield's arms encircle him. They are lifting him bodily. He is making not the slightest resistance. Of course there can be no scrap when a man will not scrap. Now they have him up over some of the seats, and are lifting him over the bar. Good-humoredly, he takes hold of the bar and thus assists them.

The finals, not to be wholly outdone of their sport, cry, "Bring him down the other side. Stand him on the dais and let's have a speech!"

Away they go across the aisle with their man, drag him down, and stand him on the dais behind the lecture desk, somewhat winded, too, even if he did not make a struggle.

"A speech! A speech!" they cry.

The giant standing there, six feet four inches tall, is puffing and smiling and laughing.

"Fellow-students," he began, "this is too rich. I am a soph myself. I put in my first year at a Philadelphia medical college. I have been hazed and elevated before; but I never thought any college would ever elevate a sophomore. However, I don't mind it at all. I came here because I heard from one of your graduates of the splendid course of study imparted in this institution. I am not sorry, because I perceive I am in very elevating society."

The boys cheered him lustily as he walked from the dais, and voted him a "brick," while many crowded around him to shake him by the hand.

During this change in the proceedings, John Ditchfield had been standing, frowning savagely at the newcomer. He had measured his man. If this fellow were to remain in the college, it would surely interfere with his brutal rule. He stood in the front row of seats, within arm's reach of where George had stepped when he descended from the dais, but he made no attempt to welcome the stranger.

Now occurred an episode which ended as a fitting climax to the day's proceedings.

The young Jew, Oliver Oppenheimer, having been forgotten during the attention which had been paid to Bolingbrooke, had loosened a great chunk of plaster from the ceiling, and, taking aim at MacMahon, let fly and hit Ditchfield squarely on the back of the head.

Turning with a fierce epithet, Ditchfield beheld sitting immediately behind him on one of the partitions or book-rests between the seats, with his feet resting on the partition immediately in front of him, a negro student, George Washington Jones by name. The darkey was grinning with delight at the discomfiture of his big enemy, as Ditchfield had always bullied him all through the first term.

Many other eyes than the little darkey's had seen whence the missile proceeded, amongst them George Bolingbrooke's.

"You ——— little nigger!" yelled Ditchfield, boiling over with rage and mad with fury. "I'll dash your little brains out."

He seized the negro boy, and, raising him bodily above his head, turned around and was about to put his threat into execution before the students actually grasped his intentions, when his thick red throat was clutched as if in a vise of iron. He struggled to release himself, his hold loosening upon Jones, who frantically slipped away out of his reach.

As soon as George Bolingbrooke saw Jones had reached a place of safety, he suddenly let go his hold, for Ditchfield was almost stifled, so strong was the pressure upon the cervical portion of his respiratory apparatus.

"What do you mean, you big lout, by interfering with me thus?" dark with rage and stagnated blood.

"Calm yourself, my dear fellow," was George Bolingbrooke's mild command. "You were going to punish one who had nothing to do with your mishap."

"Anyway, I'll teach you to mind your own business and not meddle with my affairs," cried Ditchfield, convulsed with jealous anger, as the students, seeing there was one who was not afraid of the cowardly bully, began jeering and laughing at him dreadfully.

With a scowl of infinite wrath, John Ditchfield surveyed his tormentors, seated high upon the window ledges and side-beams and the cross-bar above his head. Then, turning his attention once more to his giant rival, he demanded: "Will you fight?"

"If it so please you," was the quiet rejoinder, "but I don't think we have very much to fight over."

"Come along then to the quad"—the usual place for these meetings.

"No," calmly and firmly. "If I am to fight at all I'll fight it out here on the platform, and the others can look on and see fair play. You are acquainted in this college. You have friends at your back. I am a stranger, but I will rely upon the final men to see justice and fair play. This space is ample when the table is removed."

"Hurrah!" cries little Felcher. "Hooray! Hooray!" whilst MacMahon hustles the table and desk out into the hall.

One of the final men, a very popular young fellow, now descends from his perch in one of the windows, where he has been enjoying this cowardly ruffianism as much as he could enjoy it, and takes his place upon the platform.

His presence is greeted with prolonged cheering as he is the President of the Students' Society, and has therefore the right to preside at all entertainments and meetings of the student body; and is not here an entertainment and a meeting which will eclipse any and everything yet held within the college halls and under their auspices.

He shoves MacMahon and Felcher off the platform, the boys cheering their approval. Then he places the two gladiators at either end of this improvised arena.

One can now study to perfection the chances of the two men.

Both are of splendid physique and of apparently equal physical endurance. Both are trained, tried athletes. George stands calmly, with arms folded across his manly breast, clothed in a double-breasted sack coat, refusing to cast it aside or strip for the occasion. Their respective heights are conspicuously unfair. Bolingbrooke is probably six inches taller than his antagonist; but his advantage in height seems to be fully compensated in Ditchfield by his almost huge, massive frame and great girth. The man measures fully fifty inches around the chest, while his powerful arms and strong, thick neck show up well beneath his low-cut guernsey.

The space is now cleared all around the platform, and not one is allowed out of the seats, with the single exception of the President of the Society, now master of ceremonies, Ralph Meredith.

Look up! What a swarm of eager, anxious, expectant faces! All are hushed, awaiting with breathless anxiety the outcome of this terrific battle. Hazing and elevation are now forgotten, and some of the more intrepid newcomers crowd down among the silent sophomores.

It is to be a fight to the finish—no rounds. From the start, they will proceed to hammer and knock each other until the end.

At last President Meredith gives the word.

With a fearful rush, Ditchfield dashes pell-mell at his antagonist, all too eager to tear and rend him asunder. He strikes out blindly, but only strikes the air, for the nimble big man from the Philadelphia medical college has side-stepped quickly; his right foot has been shot out, catching in the instep of the big bully, who goes sprawling headlong over one of the two stoves which stand in either corner of the room. Luckily for him there was no fire therein—term beginning first week of October—else his hands and face must have been assuredly badly burned. He picks himself up from his laughable plight and turns upon Bolingbrooke a face horrible in its diabolical atrocity. Every pimply point in that coarse countenance seems ready to burst, so intensely congested is its aspect.

Again he charges in his blind, headlong fury, and again he meets a calm reception.

George has changed his position. He is crouched this time, ready to meet him. As John rushes on at his opponent, he is met half-way. Bolingbrooke has rushed, too, but with his eyes on the game. Ditchfield feels a pair of strong arms about him. He feels them stronger and more powerful than his own. A quick catch around his body—the hiplock—and the burly ruffian is sent spinning clear over the doubled-up body of his adversary. Bang he

goes with appalling momentum against one of the swing doors leading out into the hall; and there he lies in a heap, stunned and unconscious, a vanquished bully, the monarch of college ruffianism deposed from his throne.

While the preparations for the fight were being completed, the Jew and the little darkey had joined forces and had quietly slipped out and away to the Dean's residence, who soon procured a squad of police and started for the college. But the alarm had been given to the boys, that the Dean and police were marching down upon them; so when the Dean and his officers arrived they found no one but the janitor bending over the prostrate form of the unconscious bruiser. The good old Dean applied some restoratives and in a few minutes Ditchfield gave a sigh as he awakened from his lethargic condition. He wiped his hand across his eyes, sat up, looked around, realized his utter downfall, and burst into a volume of blubbering tears. The Dean dismissed the minions of the law, requested the janitor to look to the vanquished gladiator, and returned to his home meditating on how this evil business of hazing could be trampled out, but inwardly happy because complaints of Ditchfield's bullying would now be few and far between.

VAGINAL DOUCHE THERAPY

Dr. W. A. Bryan, Kent, Iowa.

The use of the vaginal douche as an adjunct to the treatment of diseases of women has a well-defined field of usefulness, and is indicated in the majority of the pathological lesions of the female generative tract. In many of these conditions it will, with due regard for proper technique and in conjunction with other measures, effect a complete cure. The failure to secure good results from this simple remedy arises, in the majority of cases, from the lack of care in giving the douche; no regard is paid to posture, temperature or amount of the fluid used, or the proper syringe. Too often do women, when taking a vaginal douche, stoop over a basin, and with a small, hard rubber nozzle, throwing a stream the size of a lead pencil, inject a variable quantity of water of

uncertain temperature into the vaginal canal. · Douches taken in this manner do no good whatever, and in many cases do actual harm. The method of giving the vaginal douche requires a certain technique which is based upon fundamental laws regulating the effect of temperature upon the organism, the action of the substances used as remedial agents, and with regard to the anatomical structure of the vaginal canal. To attain any success in the treatment of female diseases by means of the douche, we must be thoroughly conversant with these laws and adapt them to each individual case. To secure the best results from the use of any remedy it is necessary that we have a definite knowledge of its action, with a clear conception of the benefits or injurious effects which follow its use, and without this knowledge we simply work at random and without purpose, and in many cases defeat the very object which we wish to attain.

The good effects which follow the use of vaginal douching depend upon three factors, and we must keep these three constantly in mind. First, the mechanical cleansing effect; second, the temperature of the fluid; third, the medication; and it is upon a proper understanding of these that our success or failure with vaginal douche therapy rests. In discussing the first factor, the mechanical effect, it will be wise to review for a moment the anatomy of the vagina. It is a muscular canal, lined with mucous membrane, and flattened from before backward, so that the anterior and posterior walls are in contact. It is divided into three portions—the orifice, the body, and the vault into which the vaginal portion of the cervix projects. The vagina runs upwards and backwards, with a slight convexity forward on account of the anterior curvature of the rectum lying behind. Its axis makes an angle with the horizon, from behind, of 65 to 70 degrees. In the middle of the anterior and posterior walls there are cord-like thickenings, and running laterally from these are well-marked rugae. On either side of the vaginal columns, and parallel with them, are deep clefts or sulci, so that a transverse section of the vagina is shaped somewhat like a letter H. It is abundantly supplied with blood-vessels, nerves and lymphatics.

To thoroughly flush the walls of the canal and get the cleansing that is essential to the good results of the douche, it is necessary that the walls be completely distended. The lateral rugae must be straightened out and the sulci obliterated before the fluid can reach the entire surface of the mucous membrane. The muco-pus must be washed out from between the folds when medicated

douches are given, otherwise the medication cannot come in contact with the walls.

Furthermore, as we see by studying the anatomy of the parts, the orifice of the vagina is on a lower level than the vault when the subject is sitting or standing; therefore the force of the stream must be sufficient to bathe the upper portion of the canal. Obviously, it is impossible to accomplish these requirements if the usual methods of douching are carried out. The small stream ordinarily employed does not distend the vagina or smooth out the walls sufficiently to thoroughly cleanse them, and the pressure necessary to force the fluid through the small opening and the entire length of the canal may do considerable harm by striking directly against the cervix and causing uterine colic or shock. The proper syringe to use is one having a nozzle which forces the fluid in a lateral direction, completely straightening out the walls of the vagina and thoroughly flushing it out, with a minimum amount of force. To diminish the force necessary, the dorsal posture should be assumed. In this position the orifice of the vagina is raised above the level of the vault, and the force of gravity assists in the distribution of the stream.

A suitable syringe, with a proper knowledge of its use and misuse, should be a part of the toilet accessories of every woman of refinement. When properly used, it is not productive of any harm, but when not properly used it may do incalculable damage. It must not be employed in any conditions other than that of washing out the discharges which are so offensive to all women, except under medical supervision, and douches must not be taken for any purpose during the menstrual period. To say that a woman should take a vaginal douche for any and all conditions, on her own responsibility, is wrong; but every woman should be instructed in the proper way to take a douche, both for purposes of cleanliness and for such conditions that might arise which would indicate its use to her physician. The daily cleansing douche is preferably taken, either in the morning, immediately after rising, or in the evening when preparing for bed. The time when it is taken is of no particular importance. The temperature of the water or salt solution used should be at least 97 degrees. A cold douche should never be taken. To avoid infection of the vagina, absolute cleanliness of the syringe is of great importance. It should be taken apart after using, washed carefully and laid away. Just before inserting the nozzle into the vagina, plunge the end into boiling water for two minutes.

In considering the second factor upon which the success or

failure of vaginal douching depends, we must study the effects of temperature upon the tissues of the body, when applied within one of its cavities. It is upon this factor that we rely principally for the relief of the many conditions of the pelvic organs, associated with congestion and inflammation. The impressions produced by the injection of any fluid into the vagina, depend, in a great measure, upon its degree of heat or cold and the duration of the application. We may disregard the effect of cold in this connection, except to dwell for a moment upon the harm it does. No vaginal douche should ever be given at a lower temperature than 95 degrees. Cold or even cool injections are capable of doing irreparable damage, and this fact should be impressed upon every woman.

The effect of a high degree of temperature, when applied to the walls of the vagina, is one of decided stimulation. It causes a stimulation of the vaso-motor nerves, which, in turn, contracts the vessels, and causes them to be depleted. Herein lies its value in conditions of congestion. This depletion is also due in part to its direct action on the muscular fibres in the walls of the vessels. Heat, applied to any muscular fibre, causes it to contract, and thus we have a narrowing of the lumen of the blood-vessels due both to direct and indirect action. This primary stimulation is followed in a variable length of time by a period of relaxation, during which the vessels are distended The length of time during which the stimulation persists is governed entirely by the rapidity of the stimulation and the length of time the heat is applied. The rapidity of the stimulation depends upon the degree of heat. Thus, a temperature of 115 degrees produces a more rapid stimulation than a temperature of 95 degrees, while an application lasting twenty minutes will produce a longer stimulation than one lasting ten minutes. It is evident, then, that we are able to regulate the time the stimulation lasts, and herein lies the value of suitable temperature in vaginal douching.

Moderate degrees of heat applied to the vaginal mucous membrane cause a relaxation of the vaso-motor nerves, with a corresponding dilatation of the blood-vessels, and are sedative in action.

It is perfectly plain that such high degrees of heat as are necessary to secure the desired effect with a douche, would be excessively painful when applied to the skin of the thighs and vulva. To protect the skin, it should be coated with a thick layer of vaseline, or a syringe used with a rubber guard which will prevent the fluid from returning and running over the skin. It is best to use such a syringe. The fluid can be injected, left in the vagina as long as

necessary, and then withdrawn into the bulb of the syringe. In this way no basin is needed, and the clothing can be protected. Furthermore, by using a syringe of this character, and leaving the fluid in contact with the vaginal walls as long as we wish, a smaller quantity is needed. As pointed out before, the duration of the stimulation is dependent principally upon the length of time the heat is applied, and when using a nozzle with a small opening, which permits the fluid to escape as soon as it enters, it is necessary to use one or two gallons of fluid. Our object is to get the permanent stimulation which follows the prolonged application of a high degree of temperature, and it is unnecessary to use as much fluid, when it is injected and left there the required time, as when a small stream is used and successive applications are needed to get the required stimulations. Again, when medicated liquids are used, we can get the benefits of the medication better by leaving the substance in the canal for a time than by allowing it to run out immediately.

In all congestive and inflammatory conditions of the vagina, uterus, tubes or ovaries, these hot douches, either with plain water or salt solution, are productive of most excellent results. In addition to the relief from pain and discomfort that they afford, they do much permanent good by driving the blood out of the overloaded blood-vessels, stimulating the muscular fibres of the organs, and raising the general tone of the pelvic viscera. All medical men have tested the utility of the vaginal douche in displacements of the uterus of long standing. They restore the tone of the relaxed ligaments, relieve the engorgement of th vessels and diminish the suffering of the patient. In many cases, if not too pronounced, they will effect a cure. In wearing a pessary for the relief of this condition, vaginal douches of hot water, twice a day, are indispensable, and once a week the vagina should be douched with hot water and soapsuds. Salt solutions should never be used while a pessary is being worn, as they cause incrustations to form on the rubber of the pessary, and eventually inflame the parts. In chronic inversion of the uterus, before replacement can be attempted, a preparatory treatment of hot vaginal douches three times a day is necessary to relieve the congestion and diminish the size of the uterus. The pain and hemorrhage of cancer can usually be controlled by copious vaginal injections, and the patient's life be made more comfortable In all infections of the vaginal canal, a plain hot water douche twice a day is indicated, in addition to the medicated douches used, and for controlling excessive hemorrhage in menorrhagia or metorrhagia, whatsoever the cause, it is the best

means we have. The injections must be given three times a day, and the duration of the application depends upon the severity of the bleeding. The injections should be continued during the intermenstrual period and discontinued when menstruation begins, unless they are needed to prevent an excessive loss of blood.

Hot water vaginal douches are of the utmost importance in the treatment of dysmenorrhea, whether due to neuralgia, diathesis, pelvic congestion or inflammation and stenosis of the genital tract due to uterine lesions. They are useful, not only during the intermenstrual period, but also at the time of the attack, as they lessen the severity of the pain and relieve the uterine spasm.

In discussing the question of medication of vaginal douches, it will only be necessary to speak in detail of the more common remedial agents, out of the great number that can be used. Every practitioner will use the drugs that have, in his own experience, proven useful in certain conditions, and a complete consideration of this question is unnecessary. We are depending more and more upon the mechanical cleansing properties and the effects of temperature to bring results in vaginal douching, and drugs are only indicated in selected cases, particularly those of infection of the vagina. In conditions where the mucous membrane of the canal is diseased, and it is due to micro-organisms, the antiseptic solutions are always helpful, if properly used. Medicated douches should always be preceded by a cleansing douche. It is absurd to expect any result from the injection of a drug when it does not come into direct contact with the mucosa, and this is impossible until the muco-pus has been washed out. Always use either plain water or salt solution for this cleansing douche. If the muco-pus is particularly difficult to dislodge, two ounces of hydrogen peroxide may be injected five minutes before the medicated douche is given.

It is always best to use the weaker solutions of drugs. Many discharges are kept up indefinitely by the use of solutions that are too strong. If the weaker solution is used at first it can always be increased in strength when we find that it is not giving the desired result.

The simplest form of medication is the salt solution, made by adding a heaping teaspoonful of salt to a pint of hot water. This may be used either for daily use, to keep the parts clean, or for its antiseptic action. Many physicians use the salt solution for douching, almost to the exclusion of all other drugs. It is contraindicated if a pessary is being worn. Either plain water can be used or a solution of potassium permanganate, 5 grains to the pint. Bichloride of mercury, of the strength of 1-10,000 or 1-20,000, is a

favorite solution for vaginal douching, and is especially indicated where strong antiseptic qualities are needed, as in gonorrheal vaginitis. The fact that it is a powerful poison makes it unsafe to put into the hands of everyone, and another disadvantage is that it coagulates albumen, and becomes inert. The compressed tablets which are usually used contain tartaric acid to prevent this. When it is used, a thorough cleansing injection must follow it, otherwise some of the drug might be left in the canal. A mild and safe antiseptic solution which has an extensive use for douching is a saturated solution of boric acid. It is non-irritating, and is particularly useful in conditions associated with an irritating discharge. An alkaline douche that can be employed with great benefit where discharges are irritating is sodium bicarbonate, one dram to a pint, and when the discharge causes a pruritis of the vulva, one dram of sodium biborate may be added to this solution. The old-fashioned prescription of alum and borax, 1-2 grain of each to a pint of water, is efficacious, and is a favorite with many physicians. Sulphocarbolate of zinc, 10 grains to the pint, and permanganate of zinc, 5 grains to the pint, are excellent in certain cases. A solution of copper sulphate, three grains to the pint, is excellent for its astringent qualities, and zinc sulphate, three grains to the pint, is useful in cases of chronic vaginitis.

The list of drugs that may be used could be continued indefinitely. The peculiarities of the case and the action of the drug will determine which we will select, but do not lose sight of the fact that, in the great majority of cases where vaginal douching is used, no medication is needed.

Proceedings of Societies

SEVENTEENTH INTERNATIONAL MEDICAL CONGRESS.

The XVIIth International Congress of Medicine will be held in London from August 6th to August 12th, 1913, inclusive, under the patronage of His Most Gracious Majesty George V., King and Emperor, and Presidency of Sir Thomas Barlow. Dr. W. P. Herringham, whose visit to this country many will recall with pleasure, is the Honorary General Secretary of the Congress. Through his courtesy we are able to publish in this issue the rules and regulations of the Congress.

Rules of Congress.

Art. 1.—The Seventeenth International Congress of Medicine will be held under the august patronage of His Most Gracious Majesty George V., King and Emperor.

Art. 2.—The Congress will be opened on the 6th August, and will close on the 12th of August, 1913.

At the time of Congress, the Central Bureau will be located in the Royal Albert Hall, Kensington Gore, W., and will be opened for the inscription of members on Tuesday, 5th August, at 10 a.m.

Art. 3.—The object of the Congress is exclusively scientific.

Art. 4.—The members of the Congress will be:

(a) Qualified members of the medical profession, who have made formal application, and have paid the subscription hereinafter fixed.

(b) Scientific men who have been nominated by a National Committee or by the Executive Committee, and have paid the same subscription.

Art. 5.—The subscription is:

£1 sterling; 25 kroner (Austria); 25 francs; 20 marks; 15 rupees; 20 kroner (Norway); 5 dollars (United States or Canada).

The wives and daughters of members of Congress desiring to profit by the advantages accorded to them must pay half the subscription fee.

Subscriptions should be sent by postal order or cheque payable to:

The Treasurers,
Seventeenth International Congress of Medicine,
13 Hinde St., London, W.

and the Section in which each member wishes to be inscribed must be indicated.

In the case of any country in which there is no system of international postage exchange, the services of a banker must be employed. No one can be enrolled as a member of Congress before the receipt of his subscription.

An applicant when sending his subscription should enclose his visiting card indicating his medical qualifications and titles and his full postal address. Any change of address must be immediately notified. Cards of Membership will be sent out from the Central Office of the Congress within eight days following the receipt of the subscription.

Art. 6.—Members of Congress will receive the volume of the Transactions recording the proceedings at the general sessions, as well as the Transactions of the Section in which they have been inscribed.

Art. 7.—The Sections of the Congress are twenty-two in number, besides which three sub-sections are established, namely:

I. Anatomy and Embryology; II. Physiology; III. General Pathology and Pathological Anatomy; IIIa. (Sub-section) Chemical Pathology; IV. Bacteriology and Immunity; V. Therapeutics (Pharmacology, Physiotherapy, Balneology); VI. Medicine; VII. Surgery; VIIa. (Sub-section), Orthopedics; VIIb. (Sub-section) Anesthetics; VIII. Obstetrics and Gynecology; IX. Ophthalmology; X. Diseases of Children; XI. Neuropathology; XII. Psychiatry; XIII. Dermatology and Syphilography; XIV. Urology; XV. Rhinology and Laryngology; XVI. Otology; XVII. Stomatology; XVIII. Hygiene and Preventive Medicine; XIX. Forensic Medicine; XX. Naval and Military Medicine; XXI. Tropical Medicine; XXII. Radiology.

Art. 8.—The organization of the Congress is in the hands of the Organizing and Executive Committees.

Art. 9.—There will be two General Meetings of the Congress, the Inaugural Meeting and the Closing Meeting. At these meetings the speakers will be the Government delegates who have been invited by the Organizing Committee or designated as such, and

these alone. At the Closing Meeting the President will announce the city in which the next Congress will be held. This will be determined by the Permanent Commission, which will sit during the Congress.

Art. 10.—The scientific work of the Congress will consist in: (a) general sessions; (b) sectional sessions; (c) Combined sessions of two or more sections.

Art. 11.—The number of general sessions and the number of speakers will be fixed by the Executive Committee. There will be no debates in the general sessions.

Art. 12.—The sessions of the sections will be occupied in formal discussions on the Reports (*rapports*), also by the reading and discussion of papers on subjects chosen by individual members of Congress. The work of the Sections is dealt with in separate regulations.

Art. 13.—Two or more Sections may hold combined sessions.

Art. 14.—Members of Congress may take part in the proceedings of Sections other than that in which they have been inscribed.

Art 15.—The speeches delivered at the Opening and Closing General Meetings, as well as the Reports opening formal discussions will be published in full. As to communications on subjects selected by individual members, only those papers will be published which the authors have personally presented to the Congress, and the Executive Committee, after consultation with the Sectional Committees, has decided to publish.

Art. 16.—The manuscripts of speeches delivered at the General Meetings must be sent to the General Secretary. The manuscripts of remarks made in discussions, and papers read by individual members at the Sectional Sessions must be delivered immediately (see Art. 14 of the Sectional Rules) to the Secretary of the Section concerned.

Art. 17.—The Central Office of the Congress will use the English, French and German languages for international business. In the General Meetings Italian may be used as well as these languages.

Art. 18.—All correspondence should be addressed to the offices of the Congress, as follows:

The Hon. Gen. Secretary,
Seventeenth International Congress of Medicine,
13 Hinde Street, London, W.

On the envelopes of letters relative to the scientific work of the Sections, the Section to which they refer should be specified.

Art 19.—Information concerning the reductions in fares granted by railway companies, hotel and boarding accommodation, excursions, etc., will be published before the 30th April, 1913.

Rules of Sections.

Art. 1.—The Sections will meet at 9.30 a.m. and 3 p.m.

Art. 2.—The first Session of each Section will be opened on Wednesday, 6th of August, at 3 p.m.

Art. 3.—The President of the Section will be responsible for the conduct of the discussions, for the application of the rules, and for the punctual accomplishment of the work of the Secretaries. If the President is prevented from being present at any Session of his Section, his place will be taken by one of the Vice-Presidents or by a member of the Council of the Section.

Art. 4.—There will be no Honorary Presidents of Sections.

Art. 5.—The Sessions will be conducted according to the parliamentary regulations in general usage.

Art. 6.—The Sessions will include discussions on the reports and the reading and discussion of papers on subjects selected by individual members.

Art. 7.—Reports (*rapports*). In each Section the morning Session will be reserved for the discussion of important questions which have been previously selected by the Council of the Section. Each discussion will be introduced by one or two reporters chosen by the Council of the Section with due regard to the International character of the Congress. The definite programme of the discussions will be published on September 30th, 1912. The manuscripts of the reports must be typewritten, and must be sent to the Central Office of the Congress by February 28th, 1913, at the latest. The reports of each Section will be printed and distributed three months before the opening of the Congress, to all members of the Section who have then been enrolled. (See Rules of Congress, Articles 4 and 5.)

The reports will not be read *in extenso* at the Session. Each reporter will, however, be allowed a maximum of fifteen minutes for an opening *resumé*, and ten minutes for a reply at the end of the discussion. Other speakers taking part in the discussion will be allowed a maximum of ten minutes only for their remarks.

Art. 8.—Members of Congress who desire to take part in the

discussion of any report may enter their names before the Congress by giving written notice to the General Secretary. During the Session they must communicate directly with the Secretary of the Section.

Art. 9.—Speakers will be called upon by the President according to the order of their inscription on the Agenda.

Art. 10.—Independent Papers. The afternoon Sessions will be devoted to the reading and discussion of independent papers. The titles of such papers ought to be announced to the Central Office of the Congress by the 30th of April, 1913. The Council of the Section has the right of selection from among the papers offered, and of declining any that they do not consider desirable. The Council of the Section will arrange the order in which the selected papers shall be read. Any papers offered after the 30th April, 1913, will only be placed upon the Agenda after the discussion of those which have been announced before this date, and have been chosen by the Council of the Section. No paper will be accepted unless the text has been received by the Secretaries of the Section before the 1st of July, 1913.

A maximum of fifteen minutes will be allowed for the reading of a paper, and five minutes for each speaker who takes part in the discussion. The author of the paper will be allowed five minutes for a reply.

Art. 11.—Speakers will receive two intimations from the President as to their time limit; notice will be given two minutes before, and at the moment of expiry of the period allowed.

Art. 12.—For certain communications of particular importance and general interest, the President may, with the consent of the Section, prolong by five or ten minutes the periods already indicated.

Art. 13.—If a speaker wanders from the subject under discussion, or indulges in personalities, the President may call upon him to sit down. If several members ask to speak upon a paper, and the hour is late, the President may, on his own authority, or upon the proposition of a member, defer further discussion upon that paper to the end of the Session, if time permit.

Art. 14.—The text of the remarks made in the course of discussions will only be inserted in the Transactions of the Congress if the speaker sends it in writing, condensed into twenty lines of print, to the Secretary of the Section before the end of the Session. (Block note-sheets will be placed for this purpose at the disposal of members by the Secretaries.)

Those who omit to conform to this regulation will lose the right to have their remarks published in the Transactions.

Art. 15.—The Executive Committee reserves to itself the right to abridge the report of any discussion, and to omit any remarks of a personal character.

Art. 16.—Private resolutions can only be proposed after previous notice given to the President, and when the business on the Agenda has already been disposed of. For the proposal of any special resolution a maximum period of five minutes only will be allowed.

The President will authorize only such resolutions as come within the limits of the work of the Section.

Art. 17.—No vote may be taken, nor any resolutions passed, upon questions of science or theory, but only on such questions as possess a practical or administrative character. On such questions the sense of the meeting will be taken by the majority standing or remaining seated.

The President will transmit such resolutions as shall be passed, through the General Secretary, to the Permanent Commission of the Congress. The Commission will decide whether the resolutions in question ought, or ought not, to be put to the vote at the closing meeting of the Congress.

Art. 18.—The Secretaries of each Section will send an account of its transactions for the daily journal. This account will mention in chronological order the subject of the reports and discussions, the papers read, the names of the speakers, and any resolutions submitted to the Section.

Medicine

Graham Chambers, R. J. Dwyer, Goldwin Howland,
Geo. W. Ross, Wm. D. Young.

A Most Important Discovery.

By Mary E. Walker, M.D., *Albany Medical Annals.*

A large number of people have passed away in recent years —suddenly—and "heart failure" has been stated as the immediate cause.

The most of such cases were not known to have had any heart ailment previously to their sudden deaths, and had a physician chanced to be present, could not have saved life by any known method.

The writer of this has discovered a method by which any person with two serviceable hands can save life, and she deems her discovery one of the most important of the age, since heart-failure is no respecter of position or number of years lived, or time, or place. Some have been found dead in the street while walking, others in bed, others while at the table immediately after having partaken of ordinary food; and many who have coughed spasmodically after having suffered from pneumonia or consumption.

Many who have died from lung troubles, and had passed the expectorating period, could have recovered but for the *spasmodic coughing,* when there was nothing more to raise, and the heart in an angry mood, so to speak, had rushed the blood out so rapidly and in such quantities that the *heart failed,* because the blood had all passed without giving time for replenishing.

When the heart takes on the mood just stated, it is like all moods in this regard, it will spend its force in a little time if placed under restraint.

What to Do.

Take the extended left hand and place just below the heart, with the fingers pointing to the centre of the chest, and place the right hand over the left, with the fingers touching the wrist of the left hand, and make a hard pressure, and continue the same until the heart has assumed normal action.

The ribs will prevent pressure sufficient to *stop* the circulation, but will be sufficient to *control* the same.

If the Nobel prize should be accorded me, I would immediately erect a Nobel Sanitarium on my estate at Oswego, N.Y., so that the forty-five thousand Swedes in the city of New York could be treated and cured by myself, when treatment for lung troubles should be needed.

I should be very much pleased to be invited to give a lecture in Stockholm, Sweden, on lung troubles.

(The great importance of the discovery of a method to prevent heart failure cannot be overlooked by scientists.—EDITOR).

The Misinterpretation of Cardiac Pain. By ALEXANDER LAMBERT, M.D., NEW YORK CITY. *New York State Journal of Medicine.*

We may not all agree with the theory that the heart is struggling to perform its work when cardiac pain is complained of, but we will agree that the latter is frequently misinterpreted.

However, the symptom is of great value in prognosis, as while mild and passing disturbances causing the condition are not often serious, yet those leaving superficial pain, either over the thoracic or other cardiac areas are much more important. Aortic valvular lesions, associated with discomfort, or mitral stenosis, give a more unfavorable prognosis than mitral regurgitation.

Intercostal neuralgia and myalgia are often the mistaken diagnosis when the heart is truly at fault, while occipital localization may be the sequence of aortic lesion.

Some General Considerations in Regard to Right Hypochondriac Pain. By JAMES D. HEARD, M.D., OF PITTSBURGH, Associate Professor of Medicine, University of Pittsburgh.

Following Dane's view that neurotic individuals have a lowered threshold of consciousness (which is another manner of stating the fact presented by the reviewer in this issue that the patient becomes hypersensitive), Dr. Heard describes a case of hypochondriac pain in which the organic disease, probably producing the original pain, was removed, but the area of hypersensitivity remained; and he contrasts the case with others where no pain developed in organic disease, and thereby operative relief was refused; ordinary stimuli not causing sensation of pain in many visceral conditions.

Heard calls attention to the following causes of right hypochondriac pain: Enlarged liver from cardiac weakness, gallstones

and cholecystitis (Cabot's statistics, while Mayo's favor the epigastrium), right pleural effusions. Following the contrast referred to, one frequently finds a greatly enlarged liver and no trace of increased sensitivity occurs.

The Jaw-Winking Phenomenon. Gaultier (R) and Bucquet (A.). *Gazette des Hôpitaux.*

The authors record the following case: A man, 55 years of age, stated that on waking one morning the left side of the face and body felt cold, the former being of a dusky color. He felt giddy, and went to work with difficulty. At his middle-day meal, it was noticed that as soon as he opened his mouth to eat or drink the left upper eyelid was forcibly elevated, showing the sclerotic wall above the iris. This combination of movements had persisted for a fortnight when the patient came under observation. On examination, during rest, there was slight drooping of the left upper eyelid, which could be voluntarily overcome, and every attempt to depress the lower jaw was accompanied by spasmodic retraction of the left upper lid. Contraction of the masseter and lateral movements of the jaw produced similar but less-marked spasm. The right side of the face was unaffected.

Cantonnet first drew attention to the occurrence of a group of cases, of which the above is an example, and Pontico has collected 40 published observations. The writers hold that there is normally an association between the two movements of elevation of the upper lid and depression of the lower jaw, and that the phenomenon described is to be accounted for by an exaggeration of the association due to a weakness of the opposing muscle. The recorded cases show a preponderance in the male sex, and that the condition is usually unilateral, generally affecting the left side. A pre-existing ptosis, congenital or acquired, seems to be essential for the occurrence of the phenomenon.—*Med. Chron. Abstract.*

Surgery

Walter McKeown, Herbert A. Bruce, W. J. O. Malloch, Wallace A. Scott, George Ewart Wilson.

Injuries of the Cervical Region of the Spine. By Lucien Lofton, A.B., Ph.D., M.D., Emporia, Va. *International Journal of Surgery.*

The writer discusses in a very superficial manner certain injuries in the upper vertebrae and reports two cases seen recently. So incomplete, however, are the details that they are quite worthless. In Case 1, which he saw some three hours after the accident, he concludes from manipulation that the "ventral arch of the atlas was resting upon the odontoid process of the axis," and this was reduced by gentle traction at first, then as motor and sensory paralysis "below the chin," and while nothing is said regarding the nature of the sensory disturbances and their recovery, the only evidence five and a half months after the accident was an atrophy of the deltoid and muscles of the left shoulder, arm and forearm. Case II. exhibits the same lack of close observation, and one is left with the feeling that in reality the writer had before him in each case an example of haematomyelia. To simply say that there was anesthesia below the chin is practically without any value in accurate diagnosis. G. E. W.

Resection of the Posterior Roots of the Spinal Cord. By William A. Jones, M.D. *J. A. M. A.*

The history of a case of severe painful attacks referred to the right hand and shoulder region, extending over a period of about 16 years, was cited as an introduction. Excision of the posterior roots of 5, 6 and 7 cervical was performed, but without relief to the paroxysms, nor, as far as could be made out, were there any changes in the sensory supply to the right upper extremity. Some eight months later Dr. C. H. Mayo repeated the unilateral laminectomy, dividing the post roots of 4 and 8. He was of the opinion too that some of the fibres of 5, 6 and 7 were still intact when he opened the dura. This latter operation did result in sensory loss

and the spastic condition of the arm disappeared, but it was more or less useless, and while the pain was distinctly lessened the patient felt that he could not recommend the treatment to similar sufferers.

In order that root resection should be of any permanent relief it is essential that the seat of the lesion be peripheral to the root, and this fact probably explains those cases—and they are numerous—in which no improvement followed. Then too there is always the possible explanation that the sufferer is afflicted with memory pain.

G. E. W.

Tuberculosis of Bladder.—A. C. Stokes, Omaha, says one very essential point to remember is that tuberculosis of the bladder gives rise to a urine which is acid in reaction, as a rule; on the other hand an inflammatory condition of the viscus gives rise to an alkaline urine, and particularly when there is pus. Urine which is acid, from a person who has symptoms of cystitis, such as pain, tenesmus and frequent micturition, would suggest tuberculosis and call for an examination for tubercle bacilli.

Albumin Reaction in the Sputum.—Raymond (*Presse Médicale*), according to his experiments, states that the appearance of albumin in the sputum whenever there is any lesion in the parenchyma of the lung, an alveolitis is confirmed. He finds it a constant accompaniment of sero-fibrinous pleurisy and acute congestions of lungs and pleura.

Influenza of the Brain.—Stepp (*Med. Klin.*) refers to influenza localizing in the brain. He reports three cases, all in the forties, and all free from cardio-vascular trouble. There was gradual development of the disturbances, paralysis of one cheek, hemiplegia, after a few days affection of the other side. In most cases influenza begins with headache, and in persons with arterio-sclerosis, ordinary apoplexy may develop readily.

Obstetrics

Chas. J. C. O. Hastings, Arthur C. Hendrick.

The Present Status of Abdominal Delivery in Obstetric Surgery.

By Cullin Fraukrod, M.D., *Am. Jour. Surgery.*

The writer very truly states that the whole damage from dragging a head through a contracted pelvis is not only the rupture of the pelvic floor, but the pulling of a large body through the pelvic brim and cervix damages the vault of the vagina and ruptures the fascial supports, which "hammock" the uterus to the pelvic bones. This is a very serious damage.

This consideration influenced the writer to adopt abdominal section in all cases in which the child was in good shape, and in which, from some disproportion the presenting part failed to engage.

Accurate pelvic measurements are made in order to select the doubtful cases and give them the best surroundings when they fall in labor, and vaginal examinations are avoided.

Hence the first indication for abdominal section delivery is a contracted pelvis and healthy child.

The second indication is uterine inertia, which the writer states to exist in 75 per cent. of American society girls. Hence a head that remains floating after a severe trial of labor by the patient is considered a fit subject for section.

3—The third indication is a thick, tight cervix due either to operations of repair or repeated labors.

4—After old ventral suspension operations.

5—Placenta previa is another indication for celiohysterotomy, especially central placenta previa.

6—Fibroid tumors complicating pregnancy are no bar to the development of a full-term child, but are best treated by celiohysterectomy at term. But ovarian tumors are best dealt with before labor, when they are removed.

7—Cancer of the cervix is safely dealt with only by hysterotomy.

8—Appendicitis. When abscess forms may require removal of the child and uterus and drainage of the abscess cavity—a most serious condition.

9—Rupture of the uterus is another indication rarely for hysterotomy.

10—Badly handled cases where there is a chance of saving the child may require a Porro Cesarean section.

11—Advanced tuberculosis, or cancer of the breast, when the patient might not stand the strain of labor, hysterotomy might be performed.

Selected cases of thyroid toxemia.

Hence summed up the indications for celiohysterotomy are:

1—Contracted pelvis, small enough to give failure of delivery.
2—Disproportion between head and inlet.
3—Floating head for any reason.
4—Uterine inertia.
5—Cervical repairs.
6—Uterine suspensions.
7—Central placenta previa.
8—Tumors of the uterus or ovaries.
9—Cancer of the cervix.
10—Badly handled cases.
11—Advanced tuberculosis.
12—Thyroid toxemias.

In conclusion the writer states that gynecologists have to admit inability to repair trauma or tears at the pelvic brim, hence any case where the head fails to engage and endangers the ligamenting and fibrous support of the uterus should be submitted to section.

A. C. H.

Acute Intussusception in Infants.

Roughton (*Clinical Journal*) strongly condemns injections in the treatment of acute intussusception in infants. Operation should be done at once, immediately the diagnosis is established. Injections lose time, are painful and add to the shock—and, even though the tumor has disappeared, it does not prove the injection has been beneficial. He advises the right rectus incision and reduces the intussusception by gently squeezing the rectal end of the tumor. Gangrenous cases are beyond hope. He has had fourteen successive cases, all successful by operation.

Physiologic Therapeutics

J. Harvey Todd.

Further Experience in X-Ray Diagnosis of Ulcer of the Stomach and Duodenum. H. Alder, M.D., H. E. Ashbury, M.D., Baltimore. *New York Medical Journal*, Oct. 7, 1911.

We have found that under normal conditions the stomach will clear itself of 90 grains of bismuth within four hours, and that bismuth retained at the site of an ulcer will be found at this point for at least two hours later, so the clearance time has been stated to be from four to six hours, as a safe period in which an ulcer can be detected; and if none is present a safe interval to feel sure that all the bismuth has been eliminated.

From these observations one can feel reasonably safe in assuming that any bismuth which remains in the stomach after normal clearance time is held there by some pathological condition which interferes with normal peristalsis or holds the bismuth by the presence of some agglutinant substance which prevents the elimination of the bismuth or by some permanent obstruction to its outlet.

Our cases are tabulated and divided into four classes:

I. Ulcer diagnosed by "X" Ray—Group a, cases verified by operation, seven; group b, cases substantiated by presence of cardinal symptoms, seventeen.

II. Cases submitted to "X" Ray examination, in which the findings were negative—Group a, negative findings substantiated by operation, twelve; group b, negative findings substantiated by later clinical history, twenty-nine; group c, negative cases substantiated by autopsy, two; group d, negative findings unsubstantiated, six.

III. Cases in which "X" Ray diagnosis was incorrect—two cases: a, ulcer not detected by "X" Ray; b, ulcer diagnosticated by "X" Ray. Operation showed gall-stones.

IV. Cases clinically: ulcer in which "X" Ray findings were negative, two.

J. H. T.

Dominion Medical Monthly

And Ontario Medical Journal

EDITED BY

Medicine: Graham Chambers, R. J. Dwyer, Goldwin Howland, Geo. W. Ross, Wm. D. Young.
Surgery: Walter McKeown, Herbert A Bruce, W. J. O. Malloch, Wallace A. Scott, George Ewart Wilson.
Obstetrics: Chas. J C. O. Hastings, Arthur C. Hendrick.
Pathology and Public Health: John A. Amyot, O. R. Mabee, Geo. Nasmyth.
Physiologic Therapeutics: J. Harvey Todd.
Psychiatry: Ernest Jones, W. C. Herriman.
Ophthalmology: D. N. Maclennan, W. H. Lowry.
Rhinology, Laryngology and Otology: Geoffrey Boyd, Gilbert Royce.
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GEORGE ELLIOTT, MANAGING EDITOR.

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COMMENT FROM MONTH TO MONTH.

Tuberculosis is estimated to be active in at least 10,000 persons in Ontario. Two thousand five hundred die annually in the Province of this disease. But five per cent. of those attacked can have institutional treatment at any one time, as there are only about 550 beds in hospitals and sanatoria set apart for this class of patient. Not more than 1,500 can be treated institutionally in any single year.

In connection with the whole sad story of fighting the "white plague," private philanthropy has led the way. Neither provincial exchequers nor federal revenues have figured to any great extent in the campaign, whether in local or national aspects thereof.

What is being left undone is appalling in its magnitude; for of the 13,500 dying annually in Canada from tuberculosis, who is to say but that nearly all could be saved.

What is true in Ontario is equally true in other provinces, and more so in some.

The Federal Government cannot too soon establish a Department of Health, long hinted at, and truly as long delayed.

It must be apparent now to even the least among the representatives of the people that private philanthropy cannot grapple with this colossal problem. A national campaign, directed and financed by the national Government, with the active co-operation

of each and every provincial government, is demanded. The cry of thousands of afflicted ones calls for action at once.

Public works, military schemes, immigration expenditure, should stand aside for a year at all events, or increased duties on luxuries be levied, to provide the initiatory fund.

The Borden administration has the chance to make the best history for itself by inaugurating such a great national movement.

The nation's power should be exerted against the nation's scourge. A national crusade and a national war can only secure the victory.

"No Naval Policy Yet," says a Toronto morning paper in criticism of the present government at Ottawa. And there is no public health policy yet cry the thousands of consumptives in Canada, many of whom will yield up their lives in 1912.

In the interest of suffering humanity, couldn't the naval policy slide or wait? Wouldn't it be far better to have a national health policy? Are not the thousands of suffering and dying Canadians of infinitely more worth to the nation than any naval policy could be? Let the people have the chance by referendum to say which policy they will choose—the conservation of human health and human life or a Canadian navy.

If governments will not look alive to human life and human health, then the people will have to make them do so. In no better crusade could a Christian power be engaged than in exterminating the "white plague." There is war enough in this for all naval and military expenditure and force.

Canadian Medicine, Montreal and McGill University in particular may well feel satisfied with the final decision of Professor J. George Adami to remain with McGill and thus refuse the very tempting offer recently made him by the Northwestern University at Evanston, Illinois.

Professor Adami has been so long and so intimately associated with not only the university and medical life of McGill, but with the social life of the metropolis as well, that the offer of the Northwestern University must have been something out of the ordinary to even tempt him for a moment to consider it.

With scarcely a doubt that Dr. Adami is Canada's foremost medical scientist, his loss would have been a distinct one—and

McGill University and Montreal would not have been the only losers.

Canadian medicine and literature has been enriched by his work and writings; and McGill University is to be warmly congratulated at his ultimate decision to remain.

The use of calcium hypochlorite in the purification of Toronto's drinking water has passed the experimental stage and may now be safely said to have established itself and proven its worth. Even with the completion of the filtration plant, however, it is deemed wise and necessary to continue the treatment with bleach.

The process is not a costly one, and the installation of any such plant but a trifling matter. It has been found that pathogenic germs are killed by one part per million of available chlorine.

Objections have been made to a certain disagreeable taste, but custom will altogether eliminate that, and even that must be overlooked where there is any question of the prevention of disease and the saving of life.

This hypochlorite treatment has now been in use some months in several of the larger cities of the United States and Canada—in Montreal, Ottawa, Minneapolis, Cleveland, etc.

There seems to be no ground for any such fancied grievances as injury to delicate fabrics, bleaching of the hair, injurious effects on the stomach, etc.

That the treatment of drinking water with calcium hypochlorite is absolutely harmless, all may be assured, even when sewage contamination is known or feared. Its advantages are abundantly, even brilliantly demonstrated, in the reduction in typhoid morbidity and mortality in those cities where it has been employed.

The Hospital World marks a new feature in Canadian medical journalistic enterprise. It has just been launched in Toronto by Dr. W. A. Young, long a medical journalist of the first calibre. It purports to be an international publication, as Toronto, Buffalo, and London, England, appear as the places of its nativity. Toronto, however, will be its abiding place. But may it travel far.

This city may now be looked upon as the centre of medical journalism in Canada, all English Canadian medical journals excepting two being published in Toronto, although a contemporary, of the tender age of one year, writing upon "Medical Journalism in

Canada," would have the medical public believe our Toronto medical journals do not come within the scope of its category.

The first number of *The Hospital World* is splendid in its make-up and material. It will supply an important field.

The Medical Review of Reviews, which includes an Index Medicus, comes to hand with many new features.

The frontispiece is a fine four-colored portrait of Louis Pasteur and his grand-daughter.

A feature is the medical cartoon, the present one being the Doctor's Dilemma—Tuberculosis and Poverty.

There is a special article on Louis Pasteur and another on Pathfinders in Medicine—Paracelsus, Iconoclast of Medicine, with portrait.

The Index Medicus embraces, as before, a list of medical journals with subscription rates, each assigned a separate number. Then follows the month's leading articles of each journal, making these departments admirably adapted for reference requirements.

The Medical Review of Reviews now takes rank as a very interesting publication; and the many added and unique features promise well for an extremely readable periodical of the medical class.

News Items

JOHN D. ROCKEFELLER has given $11,000 towards the preservation of the house in which Pasteur was born.

DR. IRA S. WILE, New York, has assumed the editorial management of the *Medical Review of Reviews*.

LOCAL Hebrews of Montreal will raise funds to continue their sanatorium for consumptives at Ste. Agathe, Quebec.

DR. E. ASSELIN has been appointed assistant to Dr. Coyle in the infectious diseases department of the Health Bureau of Montreal.

DR JOHN G. CLARK, Philadelphia, gave an illustrated address before the Academy of Medicine, Toronto, on the 20th of February. The subject was "The Surgical Phases of Enteroptosis."

WESTERN Hospital, Montreal, received 1,360 patients in 1911. The death rate was 3.09. In the outdoor departments 11,520 consultations were given.

COPPER CLIFF Hospital was burned to the ground the night of the 17th of January. The loss is $40,000 on building and $10,000 on equipment, fully covered by insurance. Eight patients were removed safely.

THE Ontario Government will acquire temporary quarters for insane and feeble-minded who have had to be lodged in Toronto Jail. A building capable of accommodating one hundred persons or more will be needed

DR. R. A. H. MACKEEN, Glace Bay, N.S., died on the 14th of January. He was a well known physician in the Maritime Provinces. He was in his fifty-fifth year and hardening of the arteries was the cause of death.

THE Reid Brothers of Newfoundland will erect a $50,000 consumptive sanatorium in St. John's and the Newfoundland Government will provide a site. They will also erect sixteen $3,000 sanatoria throughout the Island.

DR. A. H. CAULFIELD, Gravenhurst, read a paper before the Toronto Academy of Medicine on the 6th of February on "The Effects of Modern Post-Mortem and Laboratory Data Upon Our Conception of the Tuberculous."

Montreal is being sued for $10,000 damages on behalf of a child alleged to have been vaccinated by municipal vaccination with vaccine of an inferior quality or infected. The jury will be asked to answer these questions: Can vaccine cause infectious neuritis? Was the quality of the vaccine used in said case good?

The Board of Management of the Protestant Hospital for the Insane, Verdun, Que., is memorializing the Quebec Government, asking that the physicians in the service be placed on the same plane with others of like rank in the civil service, as regards pensions.

Dr. Warren P. Morrill, who resigned as superintendent of the Sydenham Hospital, has accepted the superintendency of the Winnipeg General Hospital, Winnipeg, Manitoba, Canada. The hospital contains 350 beds, and is the great general hospital of the Northwest, as well as the teaching hospital of the University of Manitoba. We extend our cordial good wishes for success to Dr. Morrill in his new field

Montreal had 9,974 deaths in 1911, 5,110 males and 4,864 females, giving a death rate of 21.39 per 1,000. This is 1.01 per 1,000 less than in 1910. The deaths of children under five years of age numbered 5,355, being 53.69 per cent. of the general mortality, or a decrease of 0.50 per cent. over the infant mortality in 1910. Measles claimed 74; scarlet fever, 76; diphtheria, 133; typhoid fever, 124; phthisis, 736, as against 785 in 1910.

Medical students are occupying the new pathological wing of the Toronto General Hospital. Unit rooms are provided, each with accommodation for fifteen students and each student has an electric light, water tap, gas jet, microscope and locker. The walls of the demonstration room are white, the floor of red flags and skirting the walls are marble bases.

The Hospital for the Insane at London, Ont., admitted five hundred patients from January 1st, 1908, to June 6th, 1910, sixteen of these being twice admitted. The males were 251; females 233. Two hundred and thirty-three, or 48 per cent., were discharged recovered or improved; eight were discharged unimproved; sixty-seven, or 13 per cent., died; five eloped; four were transferred; five were deported, and 162, or 33 per cent., remained in residence.

Correspondence

ONTARIO MEDICAL ASSOCIATION.

The next Annual Meeting of the Ontario Medical Association will be held in Toronto, May 21st, 22nd and 23rd.

The officers of the Association are putting forth their best efforts to make the meeting a success both from a social and educational standpoint, and hope that you will be able to attend and take part in the carrying out of the programme.

It is the intention of the committee on papers to make the programme more clinical in character than has hitherto been the custom. The morning of the second day of the meeting will be devoted to a clinic in the building in which the Association will meet; and on the morning of the third day clinics will be held in the various hospitals of the city. Programmes of these clinics will be distributed on the first day of the meeting.

You are cordially invited to present cases at either of these clinics. If you are unable to show a patient we should be pleased to have you contribute a clinical report of an interesting case to be read at the afternoon or evening sessions.

F. ARNOLD CLARKSON,
General Secretary,
471 College Street.

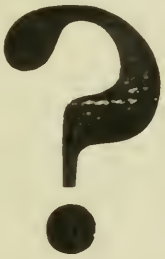
GRAHAM CHAMBERS,
Chairman Committee
Papers and Business,
26 Gerrard St. East.

On Monday evening, the 20th of May, just prior to the annual meeting of the Ontario Medical Association, on the three following days, May 21st, 22nd and 23rd, in Toronto, the graduates of Trinity Medical College will hold a re-union banquet at some place to be designated in a later announcement. A committee is in charge of the matter. Dr. Samuel Johnston, 169 Carlton Street, Toronto, is the Secretary of the Committee. Trinity men are urged to attend this reunion and to send in notice at an early date of their intention to be present.

Publishers' Department

SAVOURY MEAT LOZENGES (BRAND).—These are composed of the Concentrated Beef Tea, and thus contain substantial nourishment in a simple and easily portable form. A few of these placed by the chair or bedside of a convalescent will allay and satisfy the craving for food between meals so often noticeable, and relieve the nurse of a great deal of worry, etc. Their chief value, however, is to those who from various causes are compelled to go without food for a length of time The doctors attending a prolonged case of midwifery, etc., barristers whose mid-day interval is taken up by a consultation, cyclists, motorists, yachting people and railway passengers, etc., who have no opportunity, or who may not desire to stop to take a meal, will find that a few of these lozenges will keep them from all signs of exhaustion or fatigue, from morning until night, or longer if necessary. And moreover, while allaying the pangs of hunger and preventing fatigue, will not vitiate or destroy the appetite when the time and opportunity to take a solid square meal arrives. It may be interesting to state on the authority of the Right Hon. Winston Churchill, who mentions in his book on the South African (Boer) War, that at the Battle of Paardeberg, many English soldiers subsisted for three days on these lozenges entirely, owing to the ordinary rations not being available, and suffered no ill-effects whatever from the lack of more solid and bulky foods. We also hold many letters from soldiers who participated in that war, testifying to the value of our meat lozenges when they were scouting or otherwise away from the main body and from supplies, many of them saying that they owed their lives in a large measure to them, as otherwise they must have starved or been rendered so exhausted as to be unable to rejoin their regiment. Canadian Agent, Newton A. Hill, 25 Front Street East, Toronto.

I RECEIVED your sample of Resinol Ointment and Resinol Shaving Stick, the Ointment is an old friend of mine and I cannot praise it too highly. The shaving stick I have never used before, but I am more than pleased with it and shall always keep it on hand. It softens the beard better than any shaving soap I have ever used and the face seems stimulated and refreshed.—Arthur A. Crawford, D.M.D., Cambridge, Mass.



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The Neglected Therapy of Convalescence.—The physician of education and experience who keeps in touch with the progress of medicine generally is well informed as to the treatment of most of the "thousand and one" ills that he is called upon to combat. The diagnosis and treatment of acute conditions, as well as the successful management of the more chronic affections, are subjects which he is constantly investigating and studying. It so happens, however, that after the dangerous shoals of medical navigation have been successfully negotiated and when the crisis or danger point has been passed the physician is all too liable to relax his vigilance and to allow the patient to convalesce without sufficient attention to the therapeutic details of this important period. While the feeding of the convalescent is of great importance, the medico-tonic treatment is equally essential, in order to improve the appetite, tone the digestive, assimilative, and eliminative functions generally, and to hasten the time when the patient shall be once more "upon his feet." Among all of the general reconstituent and supportive measures in the therapy of convalescence, none is more essential than the reconstruction of a blood stream of vital integrity and sufficiency. Pepto-Mangan (Gude) is distinctly valuable in this special field, as it furnishes to the more or less devitalized blood the necessary materials (iron and manganese) in such form as to assure their prompt absorption and appropriation. One especial advantage of administering these hematinics in this form is that digestive disturbance is avoided and constipation is not induced.

Baldness and its Treatment.—The question of baldness and of the chances of its successful treatment is naturally one of absorbing interest. In all parts of the civilized world the tendency of hair to depart in an untimely manner from the heads of members of the rising generation is becoming more and more evident. The sight of a bald young man is so frequent as to give rise to no comment, and when a man reaches middle age he is almost expected to be bald to some extent. Gottheil, in *Progressive Medicine* for September, 1911, deals with the matter at some length. He deprecates the tendency to treat the subject as a joke and discusses the ordinary forms of premature or senile alopecia, commonly associated with or following prevalent scalp affections known as seborrhea or eczema seborrhoicum. In recent years the custom of discarding head gear in the belief that thereby the growth of the hair will be stimulated or that its loss will be stayed, has been widely adopted. The fact is, however, pointed out that the skin and its

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appendages are peculiarly susceptible to the action of the sun's rays. Overindulgence in sun baths is prejudicial to the human organism, causing irritability and nervousness, cardiac and circulatory disturbances, and dermal lesions, sometimes of a serious nature. Well-known authorities on skin diseases state their belief, founded on long experience, that extended exposure to the rays of the sun finally causes marked baldness. Indeed, the effect of the X-rays is similar to that of the actinic rays of the sun in this respect. Yet the hatless habit must not be wholly condemned offhand. Undoubtedly it has its advantages, and it must be noted that savages in tropical climates, who wear little or no protection for the head, in the great majority of cases possess an abundant crop of hair. Furthermore, it is a moot question as to whether interference with the circulation caused by our modern tight-fitting hat bands is not as harmful to the growth of the hair as prolonged exposure to the actinic rays of the sun. Baldness is without doubt a disease of civilization and is one of the penalties attached to being an inhabitant of a progressive and cultured country. Perhaps the more civilized the country the more prevalent will baldness be, for extreme civilization infers a mode of life furthest removed from that of nature. Indeed, a lack of hair is almost synonymous with the acme of civilization and is one of the most annoying of the white man's burdens. As for the treatment of baldness, few dermatologists are agreed on a uniform plan. It would seem that the most rational and most common-sense remedial and preventive means, that is, when no definite disease is present, are to stimulate the tissues of the scalp and to increase the blood supply of the hair follicles. This may be best done by a second person. Brushing should be proceeded with vigorously and persistently for months, supplemented with the application of a suitable lotion. Even then no certain results can be guaranteed. Some check the loss of hair by these methods, others do not attain this much-desired end, and some apparently thereby hasten the defluvium capillorum.—*Medical Record.*

A contemporary published, the other day, an article entitled, "Health and the Nose." Which reminds us that one meets not infrequently, especially in cold weather, a nose which, to judge by its complexion, is obviously enjoying ruder health than the face to which it is attached.—*Punch.*

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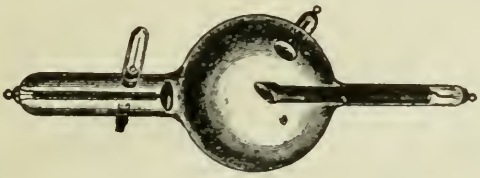

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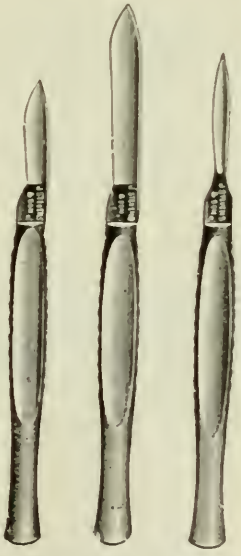

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Why Digitalis Sometimes Fails.—This is the title of a neat little brochure purporting to set forth many opinions by eminent writers upon the subject of digitalis and its administration. It sets forth clearly and concisely the indications and contra-indications for the administration, the conditions where it is not needed, where it is, and where it may do harm. These collections from the writings of eminent writers can be had by addressing The Hoffmann-LaRoche Chemical Works, 65 Fulton Street, New York.

Pneumonia, they say in the text books, is a self-limited disease and requires no specific medication. Pneumonia, however, is a disease which can make and unmake the local reputation of a physician and it behooves him to follow his experience rather than theoretical instruction. It is well to bear in mind two of the pathological conditions of this disease—congestion and resolution. The one is present when the doctor arrives, and the other he hopes to produce. The relief of the congestion is imperative. It is difficult for the blood to pass into the circulation through a congested lung, hence, we must make it easier for the blood to pass into the arterial system. In sthenic individuals with a full bounding pulse, venesection used to be the modus operandi, but nowadays it is far better to "bleed but save the blood." Inflammation of the lung is in no wise different from an inflammation elsewhere, other than that it is perhaps more deep seated. Clinical experience has demonstrated that moist heat in the form of Antiphlogistine with its hygroscopic and osmotic action, properly applied and properly protected, is almost specific in pneumonia. When you have bridged over and relieved the congestion and prevented the occurrence of inflammatory exudates, your patient is half way toward resolution and recovery.

The Massage Institution at 20 Walmer Road, Toronto, just north of Bloor Street, established only a few months ago, and conducted and supervised by Mrs. MacKinnon, is now one of the established medical institutions of Toronto. All branches of massage are carefully administered, Mrs. MacKinnon having had considerable experience in the Home Country. There are also electrical, electric light and needle spray baths; and the appointments and surroundings are all that could be desired. Male patients are attended by a masseur of practical experience. In every way, Mrs. MacKinnon attends to the comfort and best requirements of all patients. Physicians are invited to visit and inspect the institution.

The Medical Press and Experiments with

BOVRIL

The Report on the nutritive value of Bovril read before the Annual Meeting of the British Medical Association is attracting wide attention in the medical profession.

The *British Medical Journal* of September 16th devoted some six pages to a detailed account of the recent experiments, in which it was shown that **in the case of human beings the body-building power of Bovril was "even more marked"** than had been previously shown in the experiments with animals."

A further article has just appeared in the *Medical Times*, and that journal points out that the experiments were originally conducted "with the object of ascertaining whether a certain beef extract (Bovril) supplied to the Government had any nutritive value or not. The results were simply startling."

"It was found that in all cases the administration of the extract (Bovril) caused an immediate increase in weight".

One important point brought out by these experiments is that this increase in weight is in tissue and muscle, and that **Bovril must therefore be regarded as a true nutrient.**

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What is Best in Tonics.—Many people, and perhaps a few physicians, are inclined to consider the terms "tonic" and "stimulant" as more or less synonymous and interchangeable. This, of course, is not the case, although some agents employed medicinally may partake of the properties of both and be properly known as "tono-stimulants." Strychnia, for instance, is a heart stimulant, but may also be considered as a general nerve and systemic tonic when given in small and frequently repeated doses. While a stimulant alone is sometimes indicated in conditions of emergency, its long continuance almost certainly produces an after depression. It is sometimes advisable, however, to give stimulant and tonic together in conditions of serious general depression, the first to "boost" the vitality and the second to hold it at the point to which it has been raised and to restore the general tone of the organism. An ideal combination of this nature is Pepto-Mangan (Gude) to which has been added the proper dose of strychnia, according to indications. This combination is especially serviceable in the convalescence of exhausting diseases, such as Typhoid Fever, Pneumonia, La Grippe, etc. It is also of much value when the heart needs support and the general system requires upbuilding. Pepto-Mangan restores vitality to the blood by increasing the number of red cells and the percentage of hemoglobin, and the strychnia assists in rendering the combination a peculiarly efficient general bracer and permanent reconstituent.

109.

Dominion Medical Monthly

And Ontario Medical Journal

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Original Articles

THE CRIME OF THE CENTURY.

By A. C. E.

About four a.m. on a Monday, Beverley Wentworth, M.D., awakened from a troubled sleep.

He placed his right hand over his heart to quiet its aching—its tumultuous beating.

Worry seized hold of him—another attack of the blues.

To-day the landlord would call for his rent; to-day the furniture man for his monthly payment; the grocer, the baker, the milk dealer, the coal collector, the butcher, probably the tailor, probably others with minor accounts.

He had had a respite—a feeling of relief when Saturday noon came; no chance of duns for a whole day and a half.

Restless, anxious, now turning to the prone, in a minute to the right, then supine, now to the left, this way and that way he rolled, soon awakening his wife.

"What is the matter, dear? You're so restless."

"Debts! Debts! Debts!"

"Never mind, dear; we'll get them paid somehow."

"Yes," he groaned, "if I could only think so; if people would only pay me what they owe me. If the Government would only abolish the charge system of doing business and everybody had to pay spot cash for everything obtained, for all goods purchased. I don't want to be rich; I only want to be out of debt. It is awful to be always hovering on the brink of bankruptcy; going to bed worrying of debts; awakening worrying of debts. If there was any let up to it—a month, three months, a year; but it is always the same—the same for ten years. People don't consider us doctors.

They think we're all making money. They think it doesn't make any difference when we are paid, how we are paid, or whether we are paid at all. They never take into account that our rent has to be paid—I owe ten months' rent now—$280."

"I know it is awful, dear, but maybe some money will come in with the morning mail. Do try to go to sleep again. If the worst comes to the worst, we have the two little kiddies,"—and soothingly, coaxingly, his wife lulled him into another slumber.

Partaking of a very light breakfast of toast and coffee, Dr. Wentworth was in his surgery that morning at nine o'clock as usual.

He took up the morning paper and began reading the news of the day. He awaited calls.

It was not long before his doorbell rang; the maid soon ushered in—the landlord, as he expected.

"Very sorry, Mr. Brown, but can't do anything to-day—probably next Monday. I am promised a good cheque for the last of the week, and I think I can safely promise you half of the arrears."

"Promises don't pay rent, doctor, and you know there is a good amount overdue," deprecated the landlord mildly.

"Yes, I know both too well, but I have to do the best I can: people consider I can live on promises—wind pudding with imagination sauce—a case of 'live, old horse, and you'll get grass.'"

Mr. Brown was a very easy landlord, with a plentiful supply of the "milk of human kindness," which was lucky for Dr. Wentworth: so he took his departure, promising to call the following Monday morning.

The door from the dining-room into the surgery opened and his wife stuck her head in:

"Who was that?" rather anxiously.

"That was the landlord. Got him staved off for another week, until—well, until I get a cheque from—somebody. Run, Margery! here is someone else," as another ring rang through the house.

"Good morning!" and Dr. Wentworth arose to meet an expected patient.

"Morning!" growled, grunted and scowled a sturdy coal heaver.

Dr. Wentworth immediately recognized a man whose wife he had been called to attend one night about eighteen months before, for a trifling complaint, one of those common disorders of digestion not worth bothering a doctor about in the daytime, but at night producing such a profound psychological impression that the doctor must come at once. Becoming tired of rendering a monthly account for $2, he had sent it to a collector.

"How dare you send a collector after me—and for $2, too. I can get any doctor in the city to go out at night for a dollar any time—glad to do it. All you doctors think about, anyway, is your money. Give me a receipt and I'll give it you, and I won't have you any more, not even if the cat was sick."

"Pay me the money, and I'll give you your receipt," calmly replied the doctor, though inwardly boiling to kick the dastard out. "No one ever gives a receipt until he gets the money."

The transaction was completed.

"Haven't you had a job all this time?" queried Dr. Wentworth.

"What's that to you?" with a snap.

"Nothing. Only I thought if you could just save two dollars in eighteen months I would give it back to you," and standing up before that begrimed, fat toad, Beverley Wentworth looked him squarely in the eye. "Now," he continued, "if you don't want me to kick you out you had better get out," and the delinquent debtor, looking at his tall, muscular frame, slunk away.

Again the door opened from the dining-room and his wife, Margery, poked in her head.

"Who was that?" There was a merry twinkle in her eye. She had overheard the conversation.

"That was a—patient. Here's the two-spot."

Ring, ring, ring, ring!

"Run! Pray for more this time!"

But the sailing was not so smooth as when the landlord called

"Good morning!" The doctor thought this might be another patient, so he was standing ready to greet him.

"Look here, Dr. Wentworth! I must have this bill settled. It's been running too long altogether—and you haven't been buying any meat from me now for over three months. Here it is—$28.75! Pay up, or I'll have the law on you! My name is Hurry, the butcher!"

Dr. Wentworth reached and took the bill from the excited purveyor and ran his eye over the items: wing roast, sirloin steak, pork chops, lamb chops, round, porterhouse, sausages, brisket, shoulder steak, kidneys, liver, bacon, eggs, sweetbreads, with repetitions. He was adding the items—thinking, deeply thinking.

"All I can let you have to-day, Mr. Hurry, is the seventy-five."

"What?" The hands clenched, the fat face got redder, the small eyes gleamed, the hair bristled. "What? Do you mean to insult me?"

A weary expression gathered and settled on the Aesculapian's countenance.

"No, Mr. Hurry, that's the honest truth. All the money in the house is $2. We have been vegetarians for the past three months, and we will have to get some bread and milk for the kiddies and some potatoes and a cabbage or two to see us through two or three days; but I'm expecting a cheque for sure this week, and I promise you that you will be paid as soon as I get it."

The honest butcher looked at him steadily for a moment.

"Is that really, honest, all the money you have? And haven't you had any meat for three months?"

"Yes, that's honest all right—not a speck."

"Here," turning over the bill, "write out an order for what you want to-day on the back of this account; telephone when you want more, and just pay me what you can and when you can."

"Mr. Hurry, that's very kind of you, and I thank you very much. Collections have been very poor all winter; but I'll pay you sure, just as soon as I can."

"All right, doctor, all right; good luck! good-bye!" and the good-natured butcher hurried away.

"There, dear, that looks better," and his wife came into the surgery and gave him a kiss. "Now you can have a nice wing roast again with brown potatoes, and a beefsteak and kidney pie."

Ring-a-ling, ling, ding, ding!

"That's the telephone this time. I'll answer it for you. It may bring you luck."

She came and whispered: "A lady to speak to Dr. Wentworth."

"Hello!"

"_____"

"Yes."

"_____"

"I'll be in until 10.30."

"_____"

"Very well; thank you," and Dr. Wentworth hung up the ear-piece and came back to his surgery.

"Who was that, Beverley?" rather anxiously from his wife.

"Haven't the remotest idea—a stranger from out-of-town, likely. She said I didn't know her and that she was at the Royal Alfred."

"Be very circumspect then, dear; you never know. Do you wish me to remain in the dining-room?"

"Yes. And you had better take the key and lock the door on that side. It is best to take precautions. As you say, one never knows."

As Dr. Wentworth's residence was in the down-town district, it

was not long before there was another ring at the door and the maid presented—the most beautiful young woman he had ever beheld.

Bowing slightly, he immediately closed the surgery door, opening into the hall, and with a wave of his hand indicated that his fair patient should be seated.

She glided rather than sank into a chair at the end of his desk with her back to the dining-room door, her face paling, her hands instantly covering it, sobbing, her whole frame quivering, loosening the sluices of a long pent up, nervous flood.

Dr. Wentworth went to his chair in front of the desk, intensive, self-confident, self-reliant. He recognized the symptoms. The diagnosis was easy. He was exceedingly glad he had asked his wife to remain in the next room, where she could readily hear all, but see nothing.

Little by little, the nervous agitation subsided, the sobs ceasing, the tears drying, the eyes clearing, the color returning; and then Dr. Wentworth could see how wonderfully nature had endowed this woman with great beauty, exquisite grace and charm, elegance, loveliness.

He saw she was luxuriantly appareled—long Persian lamb coat, Alaska sable stole and muff; large, handsome hat with one great, drooping, white ostrich plume; black velvet, close-fitting skirt and the daintiest patent leather boots just peeping out beneath. Her very portmanteau was expensive—all suggestive of wealth and refinement.

The practised eye of the physiognomist took in the angular arch of the delicately traced eyebrow, the anxious, worried expression, that look when once seen which denotes the inward harrying of conscience and of heart.

"You wish to consult me?" asked Dr. Wentworth, sympathetically questioning.

"Yes." And she, with downcast eyes, a hesitating and subdued enunciation, told her tale.

He heard her to the end and quietly replied: "I'm very, very sorry, but I can do nothing. Your case is beyond me."

"How? I do not understand." She leaned forward on the desk, and, clasping her two shapely hands, from which the gloves had been removed, displaying long, taper, bejeweled fingers, summoned all the power of her enrapturing hazel eyes, from which the high light dazzled like brilliants, pleading, imploring, that he would have compassion and yield and comply with her entreaties.

But, though her beauty dazzled him, mystified him, he only replied: "I cannot."

"But, doctor, only think what it means to me. I am an only daughter. It will kill my poor father; he occupies such a proud and distinguished position in society. Thank God, I never knew my sainted mother. She died when I was only two years of age. Is my whole life to be ruined for such a triviality, I ask of you? Am I to be an outcast from my friends—from that society I love so well? Are the gray hairs of my noble father to be bowed in shame? Is the even of his life to be embittered as was the morn? Is the scoff of society to be leveled at him? Is the finger of scorn to be pointed at him? Is he to suffer all this for my one sin?"

"I am afraid so, so far as I am concerned. But wait, perhaps I can aid you. Nature is unerring in her course. In due time I can be a good physician to you."

"No—not that—never!" she exclaimed.

"Then our consultation is at an end," and he quietly arose as a signal for her withdrawal.

"Oh, but doctor! You are a young man, unmarried perhaps, perhaps with sisters of your own. Surely you will take pity upon me. Surely"—she began opening her portmanteau—"surely money—I am wealthy—surely this would be some inducement."—holding out a packet of bank notes—"surely for a thousand dollars—there are ten one hundred dollar notes in this packet—surely for that you will save me."

He was moved, deeply moved. The hideous spectre of debts came before him. He thought of the rent overdue and unpaid; of the bills he had to meet—all could be more than satisfied with this amount. The temptation came upon him; it would be so easy—a matter of strict asepsis.

A slight noise in the dining-room like the clinking of glasses on the buffet, called him back to the path of rectitude. His wife had saved him.

Rising up before her, his face paling, his brow contracting, his lips tightening, his eyes fixing steadily upon her, strong, earnest, sincere, determined—she saw all rapidly——

"For a thousand dollars, doctor!" she pleaded, thrusting the packet towards him.

"Listen!" he said. "Listen! I am a married man. I have a loving, a lovely and a well-beloved wife. God has blessed our union with two, to me, beautiful children. Money I need, but not this kind of money. Do you realize what you ask of me? Do you, who may have already sinned, correctly understand? To your self-confessed sin, you now wish to add a crime. Thus you are an accomplice before the fact. All my honor, all my manhood and all my

knowledge of the Commandment, 'Thou shalt not kill,' as well as my knowledge of the law of the land and the consequences which might ensue, would hold me from ever committing this crime. Why do you, a perfect stranger to me, wish me such ill will as a guilty conscience? Do you not know that upon my head would descend the righteous hand of the law in case of accident to yourself, whilst you, if you survived, would be privileged to give evidence against me in the interests of the State? You are guilty now of sin. You are guilty now of exciting me to crime. My professional honor holds your trust inviolable. The law looks askance at your part in the criminal act, in this, the heinous crime of the century, but deals with my part judicially and unmercifully. I am sorry, but I value my conscience, my wife and my family, my honor and my hope of the hereafter. No money can purchase them."

Without a word or even a look she arose and took her departure.

As Dr. Wentworth turned from closing the street door after her, his wife was beside him, two arms were around him—and "Beverley!" was the smothered sob on his bosom.

A few days later the newspapers told the sequel. From the advertising columns of one, she discovered the address of a ruffian, a villain and a quack who did the deed. Beautiful Estelle G—— lost her life, a victim of blood-poisoning; and the pestiferous beast of society yielded his on the gallows.

METHODS OF DIAGNOSIS OF THE NATURE OF GLANDULAR ENLARGEMENTS AT THE ROOT OF THE NECK.

By O. C. Gruner, M.D.
Pathologist to the Royal Victoria Hospital, Montreal.

The means which are available for making a diagnosis of the nature of glandular enlargements at the root of the neck, other than tuberculous and syphilitic, are not called for very infrequently. The advances made during recent years in the study of blood cells and tumor cells suggest more satisfactory methods of diagnosis by the laboratory worker, though the clinician does not have his attention called to them so often. It is the purpose of the present paper to present some data for guidance, with the hope that the clinician may derive more benefit from the microscopic methods of diagnosis than is usually thought possible. The basis

of the remarks which follow is the study of several cases which came to autopsy at the Royal Victoria Hospital, Montreal, added to a collection of similar cases observed in England.

The class of case under consideration is one in which there is a mass at the root of the neck, associated or not with glandular enlargement up the sides of the neck, and with dulness over the upper part of the manubrium sterni. It is assumed that tubercle and syphilis are excluded by the usual means. There may or may not be a slight, possibly periodic, elevation of temperature.

There are three possible methods of aiding the physician or surgeon:

1. By the histological study of an excised gland.
2. By the examination of the blood-films.
3. By the examination of the bone-marrow.

These three methods each have their peculiar pitfalls, and it is proposed to discuss them largely from this point of view. The interpretation of the histological findings of excised glands requires a pre-formed clear conception of the nature of the changes (other than syphilitic or tuberculous) which may occur in them.

1. The histological study of an excised gland. When glandular enlargements of obscure nature have existed for some time it is desirable to make a "test-excision" as long as the absence of any serious adhesions allows this to be done without danger. The tissue so excised should not be subjected to the freezing method of section-cutting, but should be very carefully treated, and the sections prepared slowly and with exact technique. Portions may be placed in formalin if a preliminary report (not earlier than 24 hours) be really desired, but other portions, as thin as possible, should be placed in Zenker's or Orth's fluid. Harris' acid haematein, and eosin and methylene blue are useful methods for staining these tissues.

The structural changes which may be met with are: those of chronic lymphadenitis of different types (excluded in our imaginary case); those of secondary new-growths (carcinoma of different forms, and spindle-celled sarcoma); and those associated with disease of the blood-forming organs.

It may be assumed that the ordinary text-book prevents any difficulties arising in the diagnosis of the secondary new-growths. The problem therefore consists in correctly differentiating certain forms of "blood-disease" by the histological changes which they produce in the lymphatic structures. As regards round-celled sarcoma, however, which is stated in some text-books to occur primarily in lymphatic glands, the view may be here expressed that

true round-celled sarcoma is very likely unknown in this situation, though the presence, microscopically, of a formless arrangement of absolutely similar cells, with scanty supporting tissue and vascular clefts, in place of true vessels, would be suggestive of this kind of tissue. Careful search would probably reveal the presence of some oat-shaped cells amongst the round cells. The cell characters are sufficiently definite; a small cell, with abundant cytoplasm, which stains rather strongly with acid dyes (eosin, erythrosin), a well-defined central nucleus which stains feebly and shows distinct chromatic nodal points.

There is a form of tubercle in which the lymph-node presents not giant-cell systems, but marked hyperplasia of the trabecular tissue and of the endothelium lining the perifollicular sinuses. It is doubtful whether this is not really a form of Hodgkin's disease, and search should be made for other evidence of the latter condition.

We may assume that the true histological picture of Hodgkin's disease is fixed at the type described by Andrews and Reed independently in 1902. The presence of many giant-sized cells, of eosinophiles, and partial or complete loss of gland structure, are the essential points. These cells are arranged almost in a heterogeneous medley, though the different kinds of cells are frequently herded together in different fields of the section. This picture, so suggestive of a granulation-tissue formation, is better labelled "malignant granuloma," the prefix indicating the malignant course of the disease, and that the prognosis is more serious than is generally supposed. The frequent association of the condition with a mass in the mediastinum would point to the presence of the latter, even though it produced only slight physical signs; it would also suggest implication of a persistent thymus. The histological characters of the form which may be expected to erode the neighboring bones and produce serious complications will be referred to later.

In a sense, there is nothing to be gained by making a diagnosis of "malignant granuloma" rather than of "sarcoma" or of "Hodgkin's disease, terminating in sarcoma." The gain lies in the more correct conception which is obtained by classifying this type of disease with the blastomycoses and other mycoses, and thus separating it off from the pseudoleukaemias. The distinction of the two varieties of Hodgkin's disease was drawn attention to by Martin (*Journ. Med. Res.*, 1901, p. 249), who classified them as infectious granuloma and lymphosarcoma, respectively. Since the latter condition is sometimes associated with simultaneous development of

changes in the diffuse adenoid tissues of the body, it should be subdivided into lymphoma (pseudoleukaemia of some authors) and lymphosarcoma.

A few words will suffice to explain the features of the pseudoleukaemic enlargements of the glands of the neck (which are best differentiated entirely from "lymphosarcoma"). The microscopic section shows a dense aggregation of small round cells, with very little fibrous tissue and entire loss of structure of lymph-node. This class of case may be, and has been, incorrectly called small round-celled sarcoma. Scrapings of the gland stained by blood-staining methods demonstrate the real nature of the constituent cells.

Lymphosarcoma of the glands of the neck. Some of the cases so described in the literature are nothing more than malignant granuloma. Others are identical with the pseudoleukaemic type already described. Others, however, occur where the tissue is almost entirely made up of large multinucleate cells and a sprinkling of lymphocyte-like cells amongst them. The multinucleate cells give the tissue an appearance somewhat recalling that of myeloid sarcoma, but the nuclei in the giant cells are few in number and large in size in the case of lymphosarcoma.

2. The examination of the blood-film. The red cells show changes in number in all the conditions referred to, and the color index is lower than unity. The total white cell count varies so much that definite rules become impossible. In pseudoleukaemias there is a tendency to absolute and relative increase of the neutrophile leucocytes, though the variation of these values with the periods of pyrexia, which tend to occur, indicates that the leucocytosis is of secondary importance. A very decided increase of the lymphocytes, especially if they were all abnormally large, would point to lymphemia (lymphatic leukaemia), but this diagnosis would have been made before a test-excision had been undertaken. The histological appearances would be identical with those described for pseudo-leukaemia. A moderate grade of lymphocytosis may be expected in the simple chronic inflammatory cases, but in lymphosarcomas there is sometimes a relative increase of the large mononuclears, as well as of the lymphocytes. The increase of the lymphocytes and the finding of unusual forms of the same (senile types, meso-lymphocytes, lymphocytoid large mononuclears, etc.) would be expected in the malignant granulomas. The details of analysis of blood cell counts on this plan cannot be dealt with in the limits of this paper.

3. The examination of the bone-marrow. This was advocated by Ghedini, who performed many exploratory punctures of the

bone marrow on the living subject. From autopsy experiments the writer is able to state that such a procedure, especially while the patient is under an anesthetic for the test-excision, would give valuable results. The presence of well-marked changes in the bone-marrow cell-count would indicate if there were any generalization of morbid processes in the blood-forming organs. The presence of multitudes of medium and small lymphocyte forms rather than of members of the myeloblast and erythroblast series would furnish very valuable information. The examination is made by staining the carefully prepared smears of the juice obtained by trocarizing the tibial head, following the methods in vogue for blood-cell work.

Lastly, a few words of comment upon the typical findings to be expected in the form of disease labelled malignant granuloma. There are three cardinal features: (1) A special type of giant cell, which is present in large numbers. The cell is usually uninucleate. The nucleus is large, pale, rich in peripherally situated chromatin granules. There is an excentric nucleus which stains metachromatically with erythrosin. Sometimes the nucleus becomes multiple by budding, and also becomes coiled into a ring form exactly comparable to the basket formation of nucleus in normal bone-marrow giant cells. In other words, as first pointed out by Kurt Ziegler, these cells are exactly like cells which might be thought to have wandered from the bone marrow into these remoter situations. The absolute size of these cells—some of them are truly monstrous—makes it extremely improbable that such migration could have taken place. The writer would sooner suppose that some stimulus had excited the endothelial cells already present to undergo metaplastic transformation into this type of cell.*

(2) The second feature is the occurrence of necroses. These phenomena are not pathognomonic of any disease. It is easy to understand that from focal thrombotic processes, or superadded bacterial infections, necrotic changes ensue here just as elsewhere. Where the disease is associated with increase of lymphocytes in the blood-stream there is loss of resistance of microbic infection, as is so well shown in leukaemias. This is also shown by the fact that

*It seems to be essentially correct that the various small round cells which we see in chronic inflammations, and in small round-celled (so-called "tumor") tissues are not necessarily identical in origin, destiny or function. Just as the genealogical table of lymphocytes—lymphoid cells—in inflammatory tissues is coming to be recognized as a complicated one, each member of the chain being capable of reversion of character to that of a previous stage, and existing only transitorily in a certain morphological form, so, in some of the other small round-celled aggregations, there must be fundamental distinctions between the cell-types. The different cells in a malignant granuloma may all have varying life histories and change their type with age, and as a result of varying toxic stimuli.

Coley finds his fluid to give rise to excessive reaction in Hodgkin's disease and leukaemia.

(3) The character of the eosinophile cells. It will suffice to draw attention to the difference which these cells exhibit from ordinary eosinophile cells. Many of them seem to be changing into plasma cell forms or to be derived from the latter. The evidence for this view will be presented separately.

The tendency to fibrosis of the glands, indicating a later stage of the disease, has already been referred to.

Conclusions: (1) That the word, Hodgkin's disease, requires to be replaced by two pathological terms—the malignant granuloma and the lymphoma (pseudo-leukaemia).

(2) This distinction would entirely remove the difficulties of diagnosis and the discrepancies between clinician and pathologist.

(3) That malignant granuloma is not pseudo-leukaemia, but is a definite pathological entity, probably of infective origin.

(4) That the diagnosis can be made during life by test-excision, supplemented by study of the lymphocyte forms in the blood films; the adoption of simultaneous study of the bone-marrow cells would materially help.

REPORT OF A CASE OF ACUTE APPENDICITIS, ILLUSTRATING THE VALUE OF A DIFFERENTIAL LEUCOCYTE COUNT.

By J. P. Kennedy, M.D.,
Surgeon to the Wingham General Hospital.

In an address, delivered at Rush Medical College Commencement, June 15, 1910, Dr. W. J. Mayo, among other things, gave this advice to the graduating class: "Write papers; they will do you much good, although at first they may not benefit anyone else." For a number of years I have been writing occasional papers, and have found it very true, that they have been of benefit to myself, at least, because, in order to write a paper, one has to institute a wider range of reading and investigation than he otherwise might do. It has been a stimulus, too, for closer observation of my cases, as well as an inducement to visit clinics, laboratories and hospital wards, where I could see things for myself. It is now well recognized that the leucocyte count in itself is of little or no value in surgical diseases, as far as diagnosis or prognosis is con-

cerned, but it is generally believed that the differential count may be of the greatest value, particularly, the disproportion between the increase in percentage of the polymorphonuclears and the actual increase in the leucocyte count itself. Gibson, of New York City, who devised a "standard chart" for the visible expression of this disproportion, says, in the *Annals of Surgery*, 1906, page 485, in speaking of the relative disproportion between the differential and total counts, "Bodily resistance is more clearly defined by this disproportion than by any other means at our command, and that of all methods of blood examination, this is the most valuable, both from the standpoint of diagnosis and prognosis." Dr. H. W. Hewitt, in an article in the *Annals of Surgery* for December, 1911, on "The Value of the Leucocyte Count in Acute Inflammatory Surgical Diseases," among other things, concludes as follows: "that in acute inflammatory surgical diseases, repeated counts at frequent intervals should be made, and if the polymorphonuclear percentage rises, while the total number of leucocytes remains stationary or falls, immediate operation should be insisted upon." He also says, "No definite percentage of polymorphonuclears can be taken to positively indicate infection. If we have a percentage of between seventy-five and eighty of polymorphonuclear cells, infection is probable; if we have a percentage of between eighty and eighty-five, infection is usually found; if we have a percentage above eighty-five, infection is almost invariably encountered." He further says, "No one will deny that repeated counts are of much greater value in diagnosis than one isolated count." Emphasizing this same point, Gibson says, "The importance of a disproportionate increase of polymorphonuclear cells, particularly if progressive, cannot be overestimated, and those wilfully disregarding such evidence are perhaps not exhausting all resources available for diagnosis." Herbert French, of Guy's Hospital, says, "If the polymorphonuclear count is high, without a marked leucocyte count, it means that the pus is under great pressure." The case I am about to report bears out these conclusions.

Mr. G., age 33, traveller, presented himself at my office about 2.40 p.m. on November 28, 1911, with the following history:

Five weeks ago, he said, he was taken sick with severe abdominal pains. His family physician, Dr. Archer, at Port Perry, who was called in, diagnosed his condition as appendicitis. He recovered in the course of a week, and had been well ever since, until the forenoon of the day he consulted me, when he was seized with nausea and was unable to eat any dinner. He took the afternoon train from Lucknow, intending to go home, but while on the train

between Lucknow and Wingham, a distance of ten miles, was attacked with severe pain across the abdomen, and upon reaching Wingham, he came to my office, asking for medicine to relieve this pain, so that he could catch a later train and go on to Toronto that night. He was a tall, rather muddy-complexioned young man, with an anxious facial appearance, and exceedingly nervous and apprehensive about his condition. Upon examination, I found his temperature normal, his pulse 62. He had not vomited, but was nauseated. A physical examination of the abdomen showed tenderness just below the navel, in the hypogastric region, and also a little to the right of McBurney's point, in the right inguinal region. There was no tenderness in the upper quadrants or left side of the abdomen, and even the walls of the lower right quadrant were not especially rigid at this time. At 3 p.m. my assistant made a blood count, which showed a leucocytosis of 16,000, the differential count showing the polynuclears to be 72 per cent. I diagnosed appendicitis, and advised Mr. G. to enter the hospital here, where we would keep him under observation for a few hours to determine whether his condition would improve or not. He, however, asked me if I could not relieve his pain, as he was anxious to go on to Toronto. I told him that it was easy to relieve his pain, but that did not mean his cure, and that I thought it very ill-advised to undertake such a journey in his present condition. After a short explanation of the dangers of appendicitis, he told me that he was quite ready to do anything I advised. I accordingly sent him to the hospital, where, upon entering at 4 p.m., he had a temperature of 92 2-5 and a pulse of 65. Before taking him to the hospital, however, and having satisfied myself with my diagnosis, I gave him a quarter of a grain of morphine. At 7 p.m. his temperature was 99 4-5, pulse 82, and blood count showed a leucocytosis of 17,290, the differential count showing polynuclears to be 89 per cent., certainly a very rapid and alarming increase in the polynuclears. At this time he was not complaining unduly of pain, being still under the effects of the opiate; but upon abdominal examination there was increased tenderness over the region of the appendix, and the muscles of the right lower quadrant were becoming quite rigid. I now examined his heart and chest and found that he had a marked systolic murmur at the base of the heart. At 9 p.m. I saw him again, his temperature now being 100 3-5 and pulse 84. As there had been a considerable increase in the percentage of the polynuclears, this increase exceeding the corresponding increase in the leucocyte count, his temperature continually rising, and the rigidity in the right quadrant of the abdomen becoming more marked all the time,

I advised immediate operation. This he at once agreed to, and accordingly, without any preparatory treatment, he was anesthetized with ether by my assistant, Dr. M. C. Calder. The abdomen being prepared by benzine and iodine, according to the Mayo method, after etherization I opened the abdomen, using a low McBurney incision, and found the omentum presenting. Without the slightest difficulty, I pulled out a large, angry, thickened and inflamed appendix, which was apparently almost ready to rupture. Although the omentum presented in the wound, it had formed no adhesions to ward off the danger. The appendix was amputated in the usual way, the stump being inverted by means of the Gould reversed mattress stitch, and the incision was closed in the usual manner, using horsehair for the skin. After operation, upon taking the clamp off the end of the amputated appendix, the pus poured out. He rallied nicely from the anesthetic, and was never nauseated after the operation. He made a splendid recovery, with the exception of a small hematoma, which formed under the skin and delayed union for a few days. Here was a case sick less than twelve hours, and yet the "pathology of the living," in this case, leads me to believe, if this man had not been operated upon at once, that within a very few hours there would have been rupture of the appendix, septic peritonitis, and probably death.

I have frequently seen clinical symptoms just as marked, and in fact more so, and yet recovery take place without operative procedure. If the clinical symptoms had not been reinforced by the blood examination, his determination to proceed on his journey would undoubtedly have overbalanced my insistence on immediate operation, and in all probability have led to his death. Accepting the findings of well-known laboratory workers, I considered the rapid disproportionate increase of the polymorphonuclear cells from 72 per cent. to 89 per cent. in a few hours, over the slight increase in the leucocyte count, of the gravest significance, and acted accordingly.

The pathological examination was made by Professor McKenzie, of Chicago. He states that the case was one of "acute, exudative, fibro-purulent appendicitis." Having given Dr. McKenzie the history of this case, he also makes the following observation on it:

"The differential count, as you have described it, undoubtedly indicates a rapid destructive process, actively stimulating the formation of protective substances. But when we know that the formation of protective substances may cease at any time, I do not see why operation should not be insisted on and a favorable prognosis given. From all our present knowledge on immunity and infection, the prognosis should be favorable when operation is allowed."

His pathological report is as follows:

"There are many distended vessels in the serous and outer muscular coats, while the inner muscular, submucous and mucous layers are infiltrated by an extensive purulent exudate. On the artery walls may be seen many strands of fibrin, which induced me to call the condition fibro-purulent appendicitis. The meso-appendix contains a quantity of fatty tissue and distended vessels. I was unable to find any pathological condition that might predispose or induce the inflammatory process, except pus infection."

A PLEA FOR THOROUGH AND SYSTEMATIC STUDY OF THE MATERIA MEDICA AND THERAPEUTICS.

By Finley Ellingwood, M.D.
Editor of Ellingwood's Therapeutist, Chicago, Illinois.

It is a generally accepted fact among those who pay any attention to the development of the study of the curriculum demanded of medical students that there is altogether too great neglect at the present time of the study of the materia medica, and that the study that is demanded is cursory, desultory, and almost entirely devoid of attraction to the students.

The physicians themselves, being asked to take an introspective view of their own knowledge of the Materia Medica, if they are honest, in the majority of cases are overwhelmed with their own ignorance of the detail of specific or exact action of drugs. Many of them blame their *alma mater*, and those that should lead in medical knowledge, for this ignorance, but I am inclined to think the individual himself is much to blame, as well.

The total profession has made marvelous advancement in the last three or four decades in the study of bacteriology, pathology, microscopy, in the development of laboratory methods of drug study, and in the study of preventive medicine and of surgery, but in doing this the individual has spent so little time upon the all-important subject of Materia Medica and Therapeutics that he actually, in many particulars, knows less of drug action to-day than he did thirty years ago. I say this advisedly and regretfully, but the individual physician is not as much a student of Materia Medica to-day as he was in the past, because the study then of Materia Medica was accounted the most important branch. It was

not overshadowed by surgery and the so-called scientific branches. To the physician, then, the all-important knowledge was to know *what medicine* to give to his patient when ill, that would *cure*.

The study of this subject is difficult. It demands concentration; it demands persistency, and unless applied to the immediate needs of the patient, unless we can make immediate application of the knowledge acquired, it is startlingly devoid of interest. It is not exact, and every student delights in exactness. But why is it not exact? It is because our total knowledge of the subject, in the first place, is imperfect; secondly, the study is not conducted in systematic, precise, scientific lines. It is not properly classified or arranged; the study is not made consistent with an exact principle of drug action.

My object in writing this paper for this journal is to attract the attention of the readers to a renewed study of the action of drugs; to the study of drugs in line with a principle at once exact, rational and attractive, and to encourage persistence in this study in these lines until the student shall have acquired a knowledge and an experience that in itself will stimulate him to a most enjoyable persistence in the study, and will enable him to say that there is in this study, when correctly conducted, a fascination that no other study possesses.

I have been trying to teach for many years the following facts: that the reason disease is not cured is because *we have the knowledge of drug action* necessary with which to cure it, or, conversely,

That failure to cure disease is due to lack of knowledge;

That disease will ultimately be subdued, in whole or in part, by remedial measures;

That doubt concerning drug action is a deadly foe to therapeutic progress;

That the study of the clinical action of the single drug *is the only true method* of drug study;

That each drug acts directly and invariably upon one or more exact conditions of disease, and, being so studied and known, an exact, reliable knowledge of drug action is obtained;

That when this knowledge is perfected we will not only prescribe for known conditions of disease with immediate success, but we can prescribe with equal success for conditions we have not previously met.

We begin our study, then, with a perfect analytical study of each disease in order to determine those conditions which are involved, in the patient we are studying at this time. We determine a knowledge of these conditions, and an ability to recognize them

whenever we find them, in whatever disease they may occur. We then determine what single remedy will always meet each one of these conditions and correct it. Here is the whole thing in a nutshell, and really this is all there is to it, as this includes a thorough knowledge of the remedies, also, with reference to their action upon exact conditions, as stated above.

I trust each reader will read and re-read these statements until he has them clearly impressed upon his mind, and will weigh them fully with reference to his own methods of studying the action of drugs, that he may compare the beauty of this method when completed, with any other known method.

It must be accepted at once that *this is the only correct method* of drug study. If we prescribe compounds because the manufacturer has advised them for certain conditions, we acquire no precise knowledge of the action of the constituents of that compound, and our prescribing is haphazard, uncertain, and largely guesswork. If we should, by close study, know the invariable therapeutic properties of each one of the constituents of that compound, we are enabled to determine whether the total compound is applicable in the case required, or whether one or two of its constituents would not work even better, or whether it is not totally inapplicable.

But if we understand drug action as above specified, we will seldom, if ever, find an excuse for prescribing a compound, especially one prepared for general conditions, but we will invariably find demands in the condition present in the patient we are prescribing for, for one, two or three single remedies of which we feel confident, and will thus promptly make a perfect adjustment to the case in hand.

This is the course we adopt in every patient, and this is the course we will adopt when we have learned our drugs, and studied specific conditions, as above suggested, and when we adopt this course the results obtained will be so satisfactory the observations made will be so rational and consistent, and the confidence we will acquire in the knowledge we have so obtained will be so much in advance of any knowledge previously acquired that the real fascination of this method will impress itself upon us, and in the future we will find ourselves willing students of the specific method of drug application.

Applying this method to the study of well-known drugs, every student is surprised at the amount of knowledge thus obtained concerning the action of some very common remedies—knowledge of actions he had no idea could be present in that drug, materially broadening the field of the drug and increasing its value to the prescriber, in some cases a thousand-fold.

Furthermore, those who have been developing this method have made observations of a great many drugs that are seldom mentioned by the principal medical journals, or prescribed by the profession at large, and which are but little known, or are spoken disparagingly of by the Committee on Pharmacy and Chemistry of the A.M.A., but which possess values, when studied in this line, actually superior to very many drugs upon which volumes have been written, as standard drugs, and as those which could not be done without.

Many of the readers of this journal have learned something in an empirical or general way concerning the action of digitalis, or aconite, strophantus, or quinine, ergot, nux vomica, belladonna, ipecac, gelsemium, turpentine, or jaborandi, as common remedies; but it is certain that studying these remedies from a specific standpoint, we have an entirely different study, and one which brings out beauties not before anticipated.

Added to this, every individual should study from this standpoint echinacea, baptisia, berberis, hamamelis, viburnum, mitchella, collinsonia, dioscorea, colocynth, iris, chionanthus, podophyllum, sanguinaria, asclepias, stieta, euphrasia, lobelia, apocynum, cactus, cratægus, calibarbean, pulsatilla, hypseyamus, rhus tox, and perhaps one hundred and fifty others that I could mention, and he would be surprised beyond measure at the knowledge that would develop, and in the ability he would have in the knowledge acquired, to cope with disease in a satisfactory manner far exceeding anything he had ever hoped or known.

It is to encourage a study, as I have said, in these lines, of both the old and the new Materia Medica that I am writing this paper. It is to disparage the common use of compounds and general pharmaceuticals, used with the *hope* only that they will cure the conditions for which they are prescribed, when a *knowledge* of exact drug action will enable the prescriber to absolutely *know*, without doubt, what will cure his patient, will make him able to cure the condition with positiveness and assurance, thus establishing the confidence of his patrons in his ability, first, and secondly, which is indeed most important, to establish their confidence in the fact that disease *can be cured* with the measures accessible to the physician.

Ignorance of drug action and doubt—therapeutic nihilism—has directly undermined the confidence of the people until the drugless methods of cure are now sought for and adopted by at least 30 per cent. of the population of the United States, until the surgeon is in demand only to any great extent. Faith in these drugless

methods cannot endure; they are auxiliary only. Let us at once re-establish the faith of the masses in correct drug action.

While I thus urge this method upon the individual physician, this knowledge cannot be acquired at once To become an efficient prescriber, one must be drilled in this study through a long period. I think it is necessary, also, that he forget much of the desultory knowledge, many of the unsystematic empirical facts, he has previously known.

To have this method properly woven in with the web and woof of his total education, it should be begun with his first day's teaching in college, and should be continued with every day's instruction during the entire course. It is a deplorable fact that so little Materia Medica and Therapeutics is systematically, clinically, and thus practically, taught in any of the colleges; and I fear there will not be much improvement in this course until the individual practitioner and the profession as a body *persistently insist* upon a more thorough teaching of this all-important branch.

I would be gratified, indeed, and I believe it would result in a most valuable discussion, if the reader of this paper would express freely his own opinions on this matter through the pages of this journal. All sides of the subject should be presented.

Medicine

Graham Chambers, R. J. Dwyer, Goldwin Howland,
Geo. W. Ross, Wm. D. Young.

An Inquiry into the Influence of the Menses on the Onset and Frequency of Epileptic Fits. By William Alexander, M.D., F.R.C.S. *Medical Press and Circular.*

The practitioner is constantly being urged to sanction pelvic operations for the treatment of epilepsy or to regulate the menses, when they tend to be irregular in these patients.

The feminine mentality considers that epilepsy like nearly all other nervous disorders must have its seat in that chamber of mysteries, the pelvis, a belief that unfortunately is fostered by many physicians.

Alexander states that the nurses say that at the periods the patients usually are worse and have more numerous and severe attacks.

The principal writers on epilepsy agree that epilepsy often commenced with the onset of menstruation; that delayed or disturbed function at puberty may coincide with the appearance of the disease, which, if of earlier onset, may then become more severe: that the period of menstruation determines the occurrence of the more severe or more numerous attacks.

Alexander has the statistics of 23 years of the epileptic homes at Maghall, and the first fact that he clearly proves is that in the vast majority of cases no influence was occasioned by the menstrual period on the production of the attacks. (In 666 months there were no fits in the menstrual fortnight compared with 334 which showed them, and in these latter cases many also had attacks in the fortnight furthest separated from the period.)

Also statistics showed that during the days immediately preceding or following the time of menstruation, there was no relation to be deduced relative to its influence on attacks.

Fifty-two of the cases developed their attacks years before the normal age for menstruation and in 17% the fits appeared years after its advent, while in only six cases did the two coincide.

Dr. Alexander can, therefore, lay no stress on any relation between the production of epilepsy and the occurrence of men-

struation, and in general this function does not in any way influence the attacks.

Surgical interference with the pelvic organs he strongly deprecates.

Flatulence.

Burnet, in the *Practitioner* for October, 1911, says that in most cases the diet will have to be carefully chosen and somewhat restricted. A rather dry diet will be found to suit best in nearly all cases—little liquid being allowed with meals. This excludes all soups and broths at the beginning of a meal and allows of only a small quantity of fluid toward the close of the meal. What the special drink should be has to be decided in each particular case. Some will do best with plain water, others may require a little stimulant—alcohol in some form.

We have to consider carefully in these cases whether alcohol is necessary, and if so what form is best. If given it should be prescribed with caution, more especially in the case of women suffering from dyspepsia, for oftentimes the temptation to seek temporary relief by its means from discomfort and flatulent distention, and the lassitude accompanying these conditions, is very great. From such beginnings a dependence upon alcoholic stimulants sometimes becomes established. If alcohol has to be given the amount should be clearly defined and given with or just after meals. Effervescing waters are often forbidden, but in the writer's opinion, if taken in strictly limited amount, they are helpful rather than otherwise, owing to the stimulus given by the gas they contain. The light white wines and clarets are of doubtful value, but sometimes a glass of dry sherry seems to aid digestion. Champagne is rarely required, but in some cases where there is much prostration it is useful for a time. Ales and stout are not as a rule well borne. No alcohol in any form should be given on an empty stomach.

Tea must be limited in quantity and must be freshly made. The stewed decoction called tea, so dear to the heart of the hospital out-patient, is a fruitful source of these digestive troubles and of the "spasms" so graphically described by the frequenters of hospital out-patient rooms. Distention and disturbances of digestion are not, however, by any means confined to the class of persons who come under treatment at hospitals, and as a source of flatulence the excessive use of tea amongst well-to-do people should be always borne in mind.

Animal food is, as a rule, best digested by these patients; it must

be carefully selected and well, though plainly, cooked—under, rather than overdone; tender beef and mutton, chicken and other birds, game, and fresh white fish. Pork, veal, goose, duck, etc., should be forbidden. It will be often found best at first to limit the meat meals—luncheon and dinner—to practically one course, light tender meat and a little vegetable with a biscuit and butter to follow. Such green vegetable will usually not be well borne, and what is given should be rubbed through a sieve—cooked as spinach is served. Often it is best to forbid potato for a time, and to substitute toast or second day's bread. Farinaceous foods have to be given carefully and the effect watched, but where digestion by the stomach is chiefly at fault starchy foods, as they are dealt with chiefly in the intestines, may be given in greater amount. The contrary holds good where digestion goes on best in the stomach; then meats are most satisfactorily digested. Ripe fruits have to be taken in great moderation, and raw vegetables, salads, etc, are not usually allowable in the earlier stages.

Whether meat preponderates in the dietary or farinaceous foods, the absolute necessity for slow eating and complete mastication of all solids should be strongly and repeatedly impressed upon the patient. It is always well to ascertain the condition of the teeth, and not infrequently some repairs have to be carried out by the dentist before complete and comfortable mastication can be attained by the patient.

Nux vomica is one of the most useful remedies in these cases and it may be given in tincture, or in pill with a quarter of a grain of capsicum and a couple of grains of compound rhubarb pill. Bismuth is of use in many instances, with an alkali such as bicarbonate of sodium, and calumba or other bitter infusion. Salicin is not used so much as we believe it might be, and given in five or ten-grain doses in water before meals is often very helpful. Pepsin seems distinctly indicated, but it is often disappointing, and at the best it must be looked upon more as a palliative than anything else. Pancretin, too, does not give the relief in all cases that we should expect from it. Salicylate of sodium with liquor pepticus, nux vomica and spirits of chloroform seems useful in a certain number of cases. Extract of malt given with or just after meals helps in those cases in which the digestion of starchy foods is obviously difficult. A few drops of dilute hydrochloric acid in water shortly after meals is often decidedly beneficial. In some cases iron and quinine seem to be indicated, and in many cases we prescribe them only to find how difficult it is to get them to agree, especially in the earlier stages. When improvement has set in they may be tried

with more confidence. A pill which is often well borne consists of a grain of reduced iron, with extract of nux vomica, quinine and pil. rhei comp. It acts as a tonic and also as a mild aperient. It may be varied by a grain of pepsin and a twentieth of a grain of arsenous acid in place of the quinine, and it is useful in anemic subjects. Calomel in very small fractional doses, given twice daily for a few days at a time, has often a very good effect, and where there is a sluggish action of the liver a grain or two of blue pill with the pill colocynth and hyoscyamus, or the compound rhubarb pill, should be given occasionally and followed, if necessary, by a mild saline in the morning, but anything like strong purgation should be avoided.

Where the distention is chiefly in the bowels salicylate of bismuth, beta-naphthol, and salol, in cachet, give at least temporary relief.

Lavage is not usually needed in the cases we are considering, but where there is much accumulation of mucus it is very helpful by clearing the stomach and thus giving a fair start to other treatment.

In acute attacks of flatulence hot water, with aromatic spirits of ammonia and spirits of chloroform with perhaps a teaspoonful of brandy, often relieves the tension and spasm. Sometimes a drop or two of oil of cajuput in mucilage has a very good effect.

In cases in which it is possible for the patient to follow such advice we may recommend riding on horseback or traveling, sea-bathing for young subjects, or a voyage, as the best means for completing the cure and preventing a recurrence of the symptoms. —*Therapeutic Gazette.*

Dr. Taylor, so aptly called the Canadian doctor's friend, is gradually gaining the reputation of one of the most careful and pre-eminent neurologists in Great Britain, and Sir William Gowers has wisely selected him as his closest associate.

Taylor, who is no longer young, states that in his experience (which is a vast one) that he each year is inclined to diagnose functional nervous disease less frequently, and more often to suspect an organic basis. He also states that the disease, disseminated sclerosis, is becoming in England the dumping ground of indefinite diseases (a tendency observed also in Canada).

Spinal Caries is a disease in which the nervous signs are very variable, and it is possible to have complete motor paralysis in the

legs and yet no curvature visible, and no loss of sensation perceptible in either extremity.

Often in these organic diseases which ultimately cripple, such as insular sclerosis and that more fatal disease subaeute combined (which by the way seems fairly common in this country) you will find a markedly hypersensitive, even hysterical mental condition associated with spinal symptoms.

Dr. Taylor describes a case of tabes with gastric crises, and in doing so emphasizes the facts that ataxia may not be a cardinal sign in this type, and also that they frequently live for many years. These cases are mistaken on account of the gastric signs for severe abdominal conditions, and in this regard he refers to an American who displayed two large scars, from the operations performed on erroneous diagnosis. (This recalls to my mind a case seen in my student days when a man was operated on for stone in the kidney, on alternate sides, without success and where the diagnosis was ultimately found to be tabes. Perhaps this is Taylor's case.)

Retrobulbar nerve disease causing loss of vision may be the first symptom of some diffuse nervous disorder, and in connection with ocular conditions it is also necessary to recall the fact that Graves disease may be earliest evidenced by the prominence of one eyeball only, while in other cases no signs appear but diarrhea, wasting, cardiac rapidity and discomfort.

Taylor adds that he has never yet advised operation for Graves disease, and that belladonna is his sheet anchor.

Treatment of Gastric Ulcer by Lenhartz's Method. By John J. Gilbride, A.M., M.D., Philadelphia.

Lenhartz's treatment takes two weeks—it is essentially a dietetic form.

He, however, orders four weeks in bed at absolute rest, and uses the abdominal icebag.

Iced milk and eggs, raw and iced, are given every alternate hour from an "iced" spoon; and the day's treatment begins at 7 a.m. and lasts until 9 p.m., with no night treatment.

About 100 c. of milk and one extra egg is added to the total of the preceding day, so that at the end of one week 800 cc. of milk and 8 eggs are being taken. Sugar is added to the eggs on the third day, but only 35 grammes of raw beef on the sixth day, while from the 7th to the 10th 80 gms. are given.

After 3—4 weeks a return to natural diet is allowed. The cases reported were successfully treated.

Reviews

W. B. Saunders Company have just issued a new (16th) edition of their Illustrated Catalogue, which describes some forty new books and new editions published by them since the issuance of the former edition. The books listed in this catalogue cover every subject of interest to the medical man. The descriptions and illustrations are such as to enable the reader to select easily just the book he wishes on any branch. It is really an index to correct medical literature—an index by which the practitioner, the surgeon and the specialist can acquaint himself with what is new in the literature of his subject. This edition also contains an illustration and description of Saunders' new building, now being erected on Washington Square, Philadelphia's new publishing centre. Any physician wishing a copy of this handsome catalogue can obtain one free by addressing W. B. Saunders Company, 925 Walnut Street, Philadelphia.

The Taylor Pocket Case Record. By J. J. Taylor, M.D. 252 pages, tough bond paper; red limp leather. $1.00. Published by The Medical Council Co., Forty-second and Chestnut Streets, Philadelphia, Pa.

The object of this book is to encourage more accurate observation and study of cases by supplying a convenient form for a condensed record of each important case, in pocket size, so that the practitioner can have it always with him, and so arranged that the necessary data can be written down in the briefest possible time—preferably while the examination is actually being made.

Thoroughness of examination is encouraged by means of a Syllabus, detailing all the points that should be considered in each case.

The blank for the first thorough examination, diagnosis and treatment is followed by spaces for sixteen subsequent visits.

The book provides for 120 cases.

Blair's Pocket Therapeutics. A Practitioner's Handbook of Medical Treatment. By THOMAS S. BLAIR, M.D., Neurologist to Harrisburg, Pa., Hospital; Author of "A System of Public Hygiene," "Blair's Practitioner's Handbook of Materia Medica," Member of the Harrisburg Academy of Medicine, American Medical Association, etc.; 373 pages, special Bible paper; bound in limp leather; price, $2.00. Published by The Medical Council Co., Forty-second and Chestnut Streets, Philadelphia, Pa.

The physician very frequently needs, for instant reference, a book which gives the best methods of treatment in any given case. Many books have been offered for this purpose, but they consisted only of collections of miscellaneous prescriptions and formulas, totally unrelated to each other, with no rules or reasons to guide in their use, and almost useless to the physician with any independence of thought or scientific bent of mind.

This book gives a condensed intelligent discussion of the best methods of treatment, based on scientific principles, with a well-tried, reliable formula occasionally to illustrate the application of the principles. The author gives many modes of treatment far in advance of the present text-books. An ingenious method of indicating relative dosage is to print the name of the drug in CAPITAL LETTERS for large doses, in ordinary type for medium doses, and in *italics* for small doses. An exhaustive "Table of Large, Medium and Small Doses" is given in the book.

The diseases treated are divided into related groups, each group occupying a chapter, according to the following classification (a copious alphabetical index provides for instant reference to any particular disease):

Chapter I. Diseases Incidental to Birth. II. Essential Diseases of Childhood. III. Essential Diseases of Environment. IV. Diseases of Occupation. V. Infectious Diseases. VI. Diseases of the Pericardium. VII. Diseases of the Heart. VIII. Diseases of the Blood Vessels. IX. Diseases of the Bronchi. X. Diseases of the Lungs. XI. Diseases of the Pleura. XII. Diseases of the Mouth, Salivary Glands and Esophagus. XIII. Diseases of the Stomach. XIV. Diseases of the Pancreas. XV. Diseases of the Intestines. XVI. Diseases of the Rectum. XVII. Diseases of the Liver and Gall Bladder. XVIII. Diseases of the Spleen. XIX. Diseases of the Peritoneum. XX. Diseases of the Uropoietic System. XXI. Diseases of the Lymphatic Vessels. XXII. Diseases of the Thyroid

Gland. XXIII. Nutritive Disorders. XXIV. Diseases of the Blood. XXV. Mental Diseases. XXVI. Diseases of the Brain and Meninges. XXVII. Diseases of the Spinal Cord. XXVIII. Diseases of the Peripheral Nerves. XXIX. Diseases of the Muscles. XXX. Animal Parasites. XXXI. Alcoholism and Drug Addictions. XXXII. Diseases of the Skin. XXXIII. Diseases of the Hair and Nails. XXXIV. The Principal Diseases of the Eye. XXXV. Diseases of the Ear. XXXVI. Diseases of the Nose. XXXVII. Diseases of the Tonsils, Pharynx and Larynx. XXXVIII. Obstetrical Therapeutics. XXXIX. Non-Surgical Gynecology. XL. Surgical Therapeutics. XLI. Essential Diseases of Old Age. XLII. Treatment of Poisoning (arranged Alphabetically as to the Different Poisons). The Appendix gives very many necessary tables for quick reference, followed by an exhaustive Table of Doses, closing with a General Index.

In order to get all this within the compass of a book for the pocket, a very thin, tough Bible paper has been used, so that it is really a much larger book than it looks.

This book will be a useful pocket companion to the physician in his daily work.

Dominion Medical Monthly

And Ontario Medical Journal

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COMMENT FROM MONTH TO MONTH.

Lord Lister, born on April 5th, 1827, died February 11th, 1912, in his 85th year. No other medical man in modern times, with possibly the single exception of Pasteur, was so universally known, respected and beloved. He was, indeed, one of the great benefactors of mankind.

Although Lister's name will be forever inseparably associated with the antiseptic theory applied to surgery, paving the way for the later asepsis, he simply sharpened the sword. He did not forge it.

"Robert Boyle foresaw that the man who should discover the true nature of fermentation would shed light on infective disease."

Holmes and Seminelweis maintained with regard to puerperal fever that certain bodies or organisms were the cause of this disease, as it had been suspected they were the cause of pyemia as well. The latter, without much theory at all, is said to have saved many lives by antiseptic principles.

Lister was inevitable after Coginard Latour's discovery that yeast consisted of living cells, susceptible of reproduction by a sort of budding process.

Pasteur showed that fermentation in beer and wines was due to living organisms, and that all putrefaction was due to a similar cause.

When the principle that suppuration was a fermentation of the flesh was established, the suggestion was soon evolved that suppura-

tion could be prevented by preventing access of the germ or destroying it when present.

This proved proposition of the germ theory then led to the application of antisepsis to surgery.

Carbolic acid was discovered in 1834 by Lange. Liebig in 1844 and Calvert in 1851 investigated its disinfectant properties. Lemaire made his first experiment in a case of gangrene in 1859; and published his book on carbolic acid in 1863, the date of the discovery of the first microbe of disease.

The Italian surgeon, Bottini, published an article in 1866 on the use of carbolic acid in surgery and taxidermy.

Lister's work is immortal. He began that work in 1865, and the place where he conducted his experiments was the Glasgow Royal Infirmary.

Reports of this work were first published in *The Lancet* of March 16th, 23rd and 30th, April 27th and July 27th, 1867.

The natural heir of Pasteur, in 1874 he acknowledged his indebtedness to that great scientist in these words: "Allow me to take this opportunity to tender to you my most cordial thanks for having, by your brilliant researches, demonstrated to me the truth of the germ theory of putrefaction, and thus furnished me with the principles upon which alone the antiseptic system can be carried out."

Lister early directed his mind towards science. After having been graduated in London in 1852, at the age of twenty-five years, he published papers on the muscular tissue of the skin and the contractile tissue of the iris. Between the years 1857 and 1862 his writings, considered remarkable and illuminating, dealt with inflammation and coagulation of the blood.

He was appointed Professor of Surgery in the University of Glasgow in 1860, later going to Edinburgh, and then to King's College, London. He was knighted in 1883 and raised to the peerage in 1897.

His claim to fame rests upon his conclusive demonstration, founded upon personal observation and application of the antiseptic utility of carbolic acid. Medical literature has fairly teemed with the brilliant results, the outcome of his life-work. Of him Henley wrote:

"The Chief."

His brow spreads large and placid, and his eye
Is deep and bright with steady looks that still;
Soft lines of tranquil thought his face fulfil—
His face at once benign, and proud, and shy.

News Items

Dr. J. C. Alguire, Athens, Ont., died suddenly Mareh 3rd.

The annual meeting of the Manitoba Medical Association will be held in Winnipeg this year.

The Legislative Committee of the Quebec Legislature has approved of the Roddick Bill.

Dr. R. A. Corbett, Port Hope, died on the 27th of January. He was in his 75th year.

Dr. Taylor, of St. Catharines, Ont., died the 13th of February, of pneumonia.

Dr. Walter S. Verrall, late House Physician at the Toronto Orthopedic Hospital, has commenced practice in Phoenix, B.C.

Dr. A. S. Moorhead, late House Surgeon Toronto General Hospital, has been successful in becoming a Fellow of the Royal College of Surgeons.

Dr. J. W. S. McCullough, Secretary of the Ontario Board of Health, recently lectured before the medical body of Queen's University.

The Medical Faculty of McGill University will consider the best means of perpetuating the memory of the late Lord Lister. The matter is in the hands of Drs. T. G. Roddick and F. J. Shepherd.

Dr. Geo. E. Armstrong, Montreal, was lately operated on by Dr. W. J. Mayo, Rochester, Minn. His many friends in the profession in Canada will hope for a speedy and complete recovery.

Dr. C. H. Britton, East Toronto, died recently after a lingering illness. The late Dr. Britton was highly esteemed in the profession. He was a brother of Dr. Wm. Britton, Toronto, a past president of the Ontario Medical Association.

The Ontario Medical Association will meet in Toronto, May 21st, 22nd and 23rd, 1912, under the presidency of Dr. Herbert A. Bruce. Dr. Graham Chambers is Chairman of Committee on Papers and Business; Dr. J. T. Fotheringham, Committee on Arrangements; Dr. A. Primrose, Chairman of Surgical Section; Dr. W. P. Caven, Chairman of Medical Section; Dr. Geoffrey Boyd, Eye, Ear, Nose

and Throat; Dr. Fred. Fenton, Obstetrics and Diseases of Women. The Secretary, Dr. F. Arnold Clarkson, 471 College St., will be glad to furnish information of this meeting.

Montreal General Hospital.—The work in this institution increased remarkably during the last year, and there was a deficit of $25,168.55. The income was $138,000. The expenditure increased by $10,000. The salaries paid amounted to $8,600. With the new addition it will take $200,000 per annum to run this institution. The indoor patients in 1911 totalled 4,146, an increase of 560. In the outdoor departments there was an increase of 1,004 consultations. The mortality of the hospital was 303. Dr. F. J. Finley was re-elected Secretary.

Montreal's Death Rate in 1911.—The death rate in Montreal has been decreasing in the past three years. In 1911 the rate per 1,000 of the population was 21.39; in 1910, 22.40; in 1909, 22.95. The death rate amongst infants in 1911 was less than in former years, but it still remains high. The rate per 1,000 in 1911 was 53.69; in 1910, it was 54.19. One-half of the deaths were in children under five years of age. Comparing the death rate with other large cities, Montreal is only exceeded by Madrid, whose rate was 27.2. London, Eng., had a rate of 15.1; Paris, 18.6; New York, 18.9; Berlin, 14.8.

International Medical Congress.—Recent communications from London, England, indicate that the XVIIth International Congress of Medicine to be held there in August, 1913, is to be of great scientific and Imperial importance. We have mentioned before that it was the intention of the President to give representation of the profession in the Overseas Dominions on the Committees of the Congress and the various Sections. We are now in a position to state that the President desiring to pay the Canadian profession a compliment has alloted two places on the British Executive and six places on the British Organizing Committee. In addition Canadians have been selected as Vice-Presidents of several of the more important sections, as well as placed on the councils of the various sections; altogether over fifty members of the profession in Canada will be thus officially associated with the Congress. There is no doubt that it is owing to the sympathetic attitude of the President, Sir Thomas Barlow, the Honorary Secretary, Dr. W. P. Herringham, and the President of the Section in Medicine, Sir Wm. Osler, that such representation has been given to Canada. The Canadian National Committee is composed of the Deans of five medical faculties, namely, Dr. C. K. Clarke,

Dean of the Medical Faculty, University of Toronto; Dr. J. C. Connell, Dean of the Medical Faculty, Queen's University; Dr. H. H. Chown, Dean of the Medical Faculty, Manitoba University; Dr. E. P. Lachapelle, Dean of the Medical Faculty, Laval University; F. J. Shepherd, Dean of the Medical Faculty, McGill University, and three who have held office in the Canadian Medical Association, Dr. George Armstrong, Montreal, and Drs. A. McPhedran and W. H. B. Aikins, Toronto.

Canadian Hospital Association.—The next meeting of the Canadian Hospital Association will be held in the Parliament Buildings, Toronto, on Thursday, Friday and Saturday, April 4th, 5th and 6th. Dr. H. A. Boyce, Superintendent of the General Hospital, Kingston, is President, and will deliver the annual address. The meeting on Thursday evening, April 4th, 8 p.m., will be open to the public, and addressed by Mr. Monro Greer, representing the General Hospital, Niagara Falls, Ontario; Dr. Helen MacMurchy, of Toronto, and Dr. Edward Stevens, Hospital Architect and Specialist, of Boston, Mass. Dr. MacMurchy will deal with the subject, "The Relation of the Public to the Hospital." Dr. Stevens will give an illustrated address on "What the Home Can Learn from the Hospital in Regard to Construction." On Good Friday a Round Table Conference and Question Drawer will be conducted by Dr. Bruce Smith, Inspector of Hospitals for Ontario. A special exhibit of hospital apparatus and devices will be made, the uses of which will be explained by Dr. W. J. Dobbie, Physician-in-Chief of the Weston Sanatorium for Consumptives. Mr. W. W. Kenny, Superintendent of the Royal Victoria Hospital, Halifax, will present a paper on "Hospital Maintenance." Dr. E. H. Young, Assistant Superintendent of the Rockwood Hospital for Insane, Kingston, will give an address on "The Hospitalization of Asylums." Dr. J. N. E. Brown will read a paper on "European and American Hospitals Contrasted." Mr. H. E. Webster, Superintendent of the Royal Victoria Hospital, Montreal, will give a paper on the "Construction of Small Hospitals." Mr. J. S. Parke, General Manager of the General Hospital, Montreal, will present a paper on "Hospital Annual Reports." Dr. James Third, Professor of Medicine in Queen's University, will deal with the question, "The Hospital from the Physician's Standpoint." Dr. Theodore MacLure, Superintendent of the Solway Hospital, Michigan, will read a paper, "Problems in the Management of Small Hospitals." Dr. C. K. Clarke and other prominent hospital workers will also present papers, among which will be one on "Hospital Housekeeping." The leading feature of the Saturday morning session will be an address by Miss Charlotte

Aikens, one of the foremost hospital workers on the continent. The subject of her address will be "Hospital Publicity Methods, Wise and Unwise." Hospital Trustees and Superintendents are eligible for membership. The question of Amalgamation with the Association of Training School Superintendents will be discussed. Members and all other persons interested in hospital work wishing to attend will be able to take advantage of the Easter reduced railway rates, and a large attendance is looked for from all parts of the Dominion. A number of hospital boards are arranging to pay the railway expenses of their superintendents in order to have their hospitals represented at the meeting.

St. John Ambulance Brigade in Canada.—There has recently been formed in Toronto a Division of the St. John Ambulance Brigade, and as the institution of this movement in Canada is of considerable interest to the members of the medical profession, a few words as to the origin of the Brigade will not be out of place. The Order of St. John of Jerusalem, to which the St. John Ambulance Association and Brigade owe their allegiance, is the modern scion of the early Knights, who in the days of the pilgrimage to Jerusalem, banded themselves together to relieve the distress and suffering which was rife amongst the religious converts who formed the ranks of these pilgrimages. As early as A.D. 1099, the merchants of Amalfi organized to relieve sufferers amongst the pilgrims, and for this purpose formed hospitals in which to receive and treat these cases. In the year A.D. 1118 Baldwin II, the then King of Jerusalem, gave the members of the original Brotherhood military status, and under their new name the members were divided into three classes, known as Knights of Justice, the Conventual Chaplains and Priests of Obedience, and those of the lower grades of society were known as the Honorary Serving Brethren. After many struggles, in which blood was shed, covering many years, the Order was driven from Jerusalem and established themselves in Malta, but were later ordered to disband, and their property was confiscated by King Henry VIII, later being revived by Queen Mary to be again disbanded by Queen Elizabeth. The Order had, however, continued to meet in secret, and in the reign of Queen Victoria, application was made to Parliament for a charter to reorganize the Order, and the necessary permission was obtained, the reigning Sovereign to be the Sovereign Head of the Order, and the Prince of Wales, the Grand Prior. From the Order was formed the St. John Ambulance Association in the year 1888, the aim of the Association being to give general instruction in the care of the sick and injured, and under its banner some hundreds of thousands have taken the course

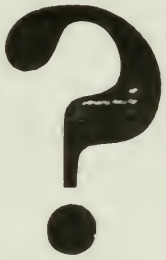
of lectures and obtained the certificate of qualification. Some years later the St. John Ambulance Brigade was formed to give those who had qualified an opportunity to practice their knowledge, and it was speedily seen that much good might be derived from having these men and women organized into a semi-military body, to give assistance wherever their services could be of use. To this end the Brigade was uniformed and drilled, and now there is no public function in London at which crowds are gathered, where there is not also detachments of the Brigade ready to deal with any case of emergency. On Coronation Progress Day, 1911, over 10,000 cases were treated along the route of the procession, by members of the Brigade. The work grew in popularity, and as a result, there are over 100,000 members within the ranks throughout the British Empire. Canada has not, however, until recently founded this movement, but since its inception in 1911, members have continued to pour into the Corps. The arrival of H. R. H. the Duke of Connaught, who is Grand Prior of the Order, should give an immense impetus to the work, and it is expected that this year will see a great expansion of the knowledge taught. Dr. C. J. Copp is the Honorary Secretary of the Ontario Executive Council of the St. John Ambulance Association, whilst Superintendent G. R. N. Collins, of Orchard View Hospital, is the Organizer and Corps Superintendent of the Ambulance Brigade. The work is one in which the medical profession may render assistance, by organizing classes for instruction in their districts, and for this service, certificates of honor are granted, while fees may be collected if so desired. Either of the above gentlemen will be glad to furnish details when asked, and will welcome the assistance of the members of the profession at all times. His Majesty King George, has graciously consented to review the St. John Ambulance Brigade at Windsor Park during the spring, and for this purpose twenty members of the Toronto Contingent will leave for England to represent Canada in May. His Majesty the King and H. R. H. the Duke of Connaught both take a keen and active interest in the advance of the work, and H. R. H. the Duchess of Connaught is the holder of the five certificates issued by the Association.

Publishers' Department

Face massage, scalp treatments, body massage, needle sprays, colored light baths and electrical massage are now essentially required as efficient adjuncts to the medical man's armamentarium. Where experience and skill in administering such treatments are assured, it is very satisfactory to the practitioner who has to refer cases for treatment under special supervision to know such will be conducted efficiently and intelligently. Toronto or out-of-town medical men will know that well-appointed parlors and sun room have quite recently been opened in the city. These are in charge of and under the personal supervision of Mrs. Neil MacKinnon, late of Scotland. The institution is conveniently and centrally located at 20 Walmer Road.

A Fine Line of Sterilized Solutions.—Hermetically sealed glass ampoules containing sterilized solutions of important drugs for hypodermic use have assumed a commanding place in medicine in a comparatively short period of time. Two or three years ago, seeing the tendency in this direction, Parke, Davis & Co. brought out a modest line of something like a half-dozen formulas, notable among them being solutions of Adrenalin, Codrenin and Cacodylate of Sodium. From this small beginning the line has expanded until now the company announces a total of about twenty distinct formulas. The full list, we understand, is now appearing in display advertisements in the leading medical journals of the country. Physicians who are interested in this advance in hypodermic medication—and every physician ought to be—will do well to search out these advertisements and familiarize themselves with the comprehensive line of solutions therein offered. Solutions provided by the glaseptic ampoule, it is obvious, have several advantages over those prepared in the ordinary manner. They are ready for immediate use: there is no necessity to wait until water can be sterilized and cooled. Accuracy of dose is ensured, each ampoule containing a definite quantity of medicament. The solutions are aseptic; they are permanent.

Brand's Beef Tea Tabules.—Another form of the Concentrated Beef Tea, most valuable to travellers, as they are so easily carried and simply need to be dissolved in a breakfast cup with



Are you particular as to the condition of the iron in your Blaud preparations?

Frosst's Perfected Blaud Capsules present True Ferrous Carbonate.

Each 10 grain Capsule contains, approximately, 1 grain of Iron.

Charles E. Frosst & Co., Montreal.

boiling water to be ready for immediate use. Doctors and nurses find them most useful and sustaining when returning home late at night, it may be from a trying case, as a cup of nutritious beef tea is prepared so easily and relieves the tired energies before retiring to rest. District nurses, sick visitors and visitors to the poor find them invaluable, as they may be carried so easily in their bag or reticule and are immediately at hand if coming across a child or person whose illness is largely, if not, in some cases, entirely due to mal-nutrition, a cup of good beef tea, quickly prepared by the aid of one of these tabules, gives tone and nourishment to the system, and in some cases will cure what seems to be a likely serious case, without the aid of the doctor. They are useful for almost any home purpose and should have a place in every store cupboard. With these tabules a cup of beef tea can be made on returning home late at night from a concert, theatre or entertainment, and is most nutritious and valuable. As an addition to gravies, stews, etc., the housewife will find them rendering additional strength and richness and a delightful flavor.

Pneumonia.—H. A. Hare, in the November number of the *Therapeutic Gazette* treats of the bearing of pneumonia, considered as a terminal infection, upon treatment. In June, 1910, he reported his experience as to the importance of studying the relative ratio of pulse rate and blood pressure in the course of croupous pneumonia, and expressed the belief that such observations were of the greatest value in the application of correct treatment. Since then increasing experience with this plan has convinced him still more that it is practically an essential factor not only in treatment but in prognosis as well. It will be recalled that the favorable ratio in croupous pneumonia is one in which the pulse rate per minute is less than the number of millimeters of mercury as shown by the sphygmomanometer. In other words, if the pulse rate be 90 and the blood pressure 120, the patient is doing very well. If the pulse rate be 100 and the blood pressure 110 he is not doing as well as before. If the pulse rate be 110 and the pressure 110 something must be done to bring back the normal difference referred to, and if the pulse rate be 120 and the pressure 110 he is in grave danger, and will probably die unless very active treatment causes him to rally before this abnormal ratio has lasted for any length of time. The fall of pressure may be considered to be the result of the toxemia which directly affects the vasomotor centres or the walls of the vessels themselves, or it may be due to a direct effect on the

REGISTERED

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heart muscle whereby this organ is unable to pump strongly enough to maintain pressure. If the heart be at fault, attention must be directed to that organ. If the vessels be at fault the difference between diastolic and systolic pressure will be marked, the heart, if strong, sending out a forcible wave of blood to fill the blood paths. On the other hand, if the pressure be low from a failing heart, there will be little difference between diastolic and systolic pressure, for obvious reasons. Although he is firmly convinced that the ratio of pulse rate to pressure is a comparatively new sign of great value, he is also equally firmly convinced that it is a fatal error to neglect all those physical signs and states on which we have relied heretofore, and any errors in prognosis or any failure in treatment do not prove that the new sign is useless, but that the human mind is not infallible so far as the physician is concerned, and the patient is not infallible so far as the progress of his disease is concerned. There is no treatment of pneumonia, but there is treatment of the patient who has pneumonia and this will vary in every case. In all cases the physician should be a watchman and a therapeutist in the sense of a drug given only when active need arises.—*Cleveland Medical Journal.*

About fifteen years ago I tried a small sample of Resinol Ointment on a patient and a persistent sore healed rapidly. I soon found its great use for all eruptions and use it very much to promote rapid healing when my work might strain the epidermis, so I feel I owe you thanks.—J. Austin Buchnall, D.D.S., Detroit, Mich.

Practical Points in the Treatment of Pneumonia.—I know of no drug which is regularly called for in the treatment of pneumonia unless it be calcium chloride (or other calcium salt). The indications for calcium in this disease seem analogous to those for iron in chlorosis: there is reason to believe that calcium starvation exists in pneumonia. Mitchell says (*Medical Record*, August 9, 1911): "Every aspect of pneumonia bears testimony to the value of calcium. We know that the pneumococcus extracts calcium from the medium in which it grows. We know that it extracts calcium from the human culture medium, for calcium products are increased in the urine and feces during pneumonia. We know that convulsions are caused by calcium poverty, and we have no reason to deny that this calcium poverty is the cause of the convulsions in pneumonia. We know that a hyperacidity is a chemical invitation

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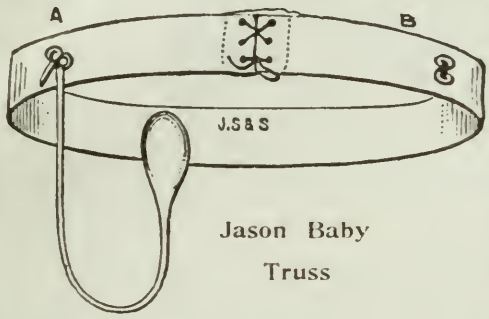

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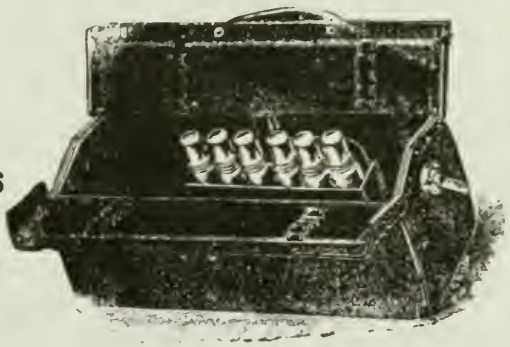

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for alkalis, and we suspect that calcium is the bidden guest in pneumonia. We know that calcium is absolutely required for the activation of lysins and opsonins, and all the phenomena of leucocytosis. We know that gray hepatization is impossible without the presence of calcium. We know that edema of the lungs and collapse of the heart occur only when the coagulation time of the blood is delayed." Mitchell recommends giving calcium chloride in ten grain doses every three hours during the disease. Pneumonia occurring in adults is often attended with cardiac strain so severe as to necessitate more or less stimulation of the right heart, particularly in the latter part of the course of the disease; and this stimulation should not be delayed too long. A sixtieth of a grain of strychnine three times a day, or every four hours, may be sufficient; or the strychnine may be required in as large dose as one-thirtieth of a grain every four hours, and tincture of strophanthus in doses of one and a half to three minims every four hours may be needed in addition. Most cases require no more stimulation than that mentioned, but some do, and additional stimulation may be provided by caffeine citrate in doses of two or three grains every four hours, camphor in doses of two to five grains every four hours, aromatic spirits of ammonia in doses of one-half to one dram every one or two hours, and digitalin in doses of one one-hundredth to one-fiftieth of a grain every four hours. Whisky in small or moderate amount should be given to patients who have been addicted to alcoholics. In the beginning of the disease a small dose of calomel followed by a dose of jalap or castor oil is usually good treatment, and the bowels should be kept open during the disease, but at the time of the crisis the patient should not be disturbed even for bowel movements. In the first twenty-four or thirty-six hours of the disease, if the patient can be seen so early, tincture of aconite in small doses may be useful; it is best given in half or quarter minim doses every hour. To secure sleep, especially in the early days of the disease, morphine may be necessary. The value of fresh air in the treatment of pneumonia has been abundantly proven, but not the value of exposure to excessive cold, especially at the time of and just after the crisis. Hydrotherapeutic procedures to reduce the temperature are of questionable value in this disease. In cases which show by a sudden fall in the systemic blood pressure, without notable signs of failure of the right heart, that vasomotor paralysis is impending, adrenalin and its congeners should be given to restore the tone of the dilated arteries; and normal saline solution should be given through the rectum and by hypodermoclysis.—*Medical Review of Reviews.*

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THE PRESENT POSITION OF SPINAL ANALGESIA.

In the *Birmingham Medical Review* of October 14, 1911, McCardie tells us that from an extensive review of all the literature available to the author on the subject he concludes that spinal analgesia is retrogressing in favor, and is generally only used when there are marked contraindications to inhalation anesthesia, and local anesthesia is not possible. The exceptions are surgeons who have had a special experience of the method in a large number of cases of the same kind. In Germany the method is being abandoned by 50 per cent. of the surgeons who have used it.

The proportion of deaths, as one would expect from the conditions, is greater than in inhalation anesthesia.

The immediate dangers are at least as great. The after-effects not uncommonly are most severe, affect the nervous system, and on the average at least are as frequent as those following inhalation anesthesia. Many of them are most persistent and disastrous, though the author asserts that the English results are much better in this respect than the foreign.

In spinal analgesia the chief after-effects are headache, backache, and raised temperature. In inhalation anesthesia, vomiting.

The percentage of failures in the former is very high. An excessive dose, whether absolute or relative, as in the case of idiosyncrasy, is more immediately and hopelessly fatal than is one after ether or chloroform, because it cannot be antagonized by mechanical and eliminative means.

The diffusion of liquid in the spinal canal is very different from the diffusion of vapor in the lungs.

In the treatment of emergencies from spinal analgesia one does wrong whether one sets up or inverts the patient; in the one case he may die of syncope, and in the other of poisoning.

Keen says that the ideal anesthesia will abolish pain by abolishing consciousness, but without danger to life. Spinal analgesia, states Zachrisson in a review of the subject, does not fulfil either of these conditions.

The author places analgesia, as a method of preventing pain, between inhalation and local anesthesia. Generally speaking, he thinks it should only be used in certain selected cases.—*Therapeutic Gazette.*

Dominion Medical Monthly
And Ontario Medical Journal

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Original Articles

WOMAN.

By James S. Sprague, M.D., Perth, Ont.

Tradition says there was a scarcity of solid elements at the time of her creation, and from a translation taken from the old Sanskrit book, with the title of "The Surging of the Ocean of Time," the following is presented: "At the beginning of time,—Twashtri—the Vulcan of the Hindu mythology—created the world. But when he wished to create a woman he found that he had employed all his materials in the creation of man. There did not remain one element over. Then Twashtri, perplexed, fell into a profound meditation. He roused himself as follows: He took the roundness of the moon, the undulations of the serpent, the entwinings of climbing plants, the trembling of the grass, the slenderness of the rose vine, and the velvet of the flower, the lightness of the leaf and the glances of the fawn, the gayety of the sun's rays and tears of the mist, the inconstancy of the wind, and the timidity of the hare, the vanity of the peacock and the softness of the down on the throat of the swallow, the hardness of the diamond, the sweet flavor of honey and the cruelty of the tiger, the warmth of the fire, the chill of snow, the chatter of the jay and the cooing of the turtle-dove. He united all these and formed a woman. Then he made a present of her to man.

Eight days later the man came to Twashtri and said:

"My Lord, the creature you gave me poisons my existence. She chatters without rest, she takes all my time, she laments for nothing at all, and is always ill." And Twashtri received the woman again. But eight days later the man came again to the god and said: "My Lord, my life is very solitary since I returned this creature. I remember she danced before me, singing. I recall how she glanced at me from the corner of her eye, and she played with me, clung to me."

And Twashtri returned the woman to him. Three days only passed and Twashtri saw the man coming to him again.

"My Lord," said he, "I do not understand exactly how, but I am sure the woman causes me more annoyance than pleasure. I beg of you to relieve me of her." But Twashtri cried: "Go your way and do your best." And the man cried: "I can not live with her!" "Neither can you live without her!" replied Twashtri.

And the man was sorrowful, murmuring: "Woe is me! I can neither live with nor without her."

To these classical lines I add classical annotations and scholia by an introductory line as confirmatory of the last sentence in the above.

Nec tecum vivere possum nec sine te. From a scriptural source I add a few lines expressive of feminine trust, humiliation and loyalty, and so charming are the words that you, reader, can, with me, in our vision behold a Cleopatra or a Lucretia:

"If I please the king, and if I have found favor in his sight, and the thing seem right before the king, and I be pleasing to his eyes." Yes, one cannot picture this woman as a suffragist—a P————a husbandette—or was she "like the bird whose pinions quake, but cannot fly the gazing snake?"

In Marmion, canto vi, you will find: "O, woman! in our hours of ease, uncertain, coy, and hard to please, and variable as the shade by the light quivering aspen made—when pain and anguish wring the brow, a ministering angel thou!" Yes, truly as the scholar wrote: "*Tu quoties aegri frontem dolor emprobus angit, fungeris angelico sola ministerio,*"—but listen how Marie Corelli dopes her sisters out, yet not as God has made them:

> "Frizzled, padded, shameless creatures!
> Dyed, with painted, powdered features!
> Furbishing your faded faces,
> Covering all hollow places,
> Thin and scraggy, semi-bald,
> 'Lovely' woman, you are called."

It may be stated that a young M.D. should not let his virgin youth be captivated by such "store" goods, anyway. Some one has said: "A man loves two women in his life—the one he doesn't marry breaks his heart; the one he does marry breaks his pocket-book, and still he is not happy," and according to the Atchison *Globe*, "After a woman has been married to a man six months, she begins to feel a romantic interest in the man she didn't marry."

Yes, "one not learned save in gracious household ways," is the ideal of one's visions, and her question is put in these words: "I dare not say I take you; but I give me and my service, ever whilst I live, into your guiding power—for this is the man."

Our brother, Dr. Oliver Wendell Holmes, tells us: "If the good Lord will go on making splendid women He must not blame us for thinking too much of his earthly manifestations," and the retrospect is: "The hours I spent with thee, dear heart, are as a string of pearls to me." As regards marriage, it has been wisely defined as an obligation that "owes its institution to nature, its perfection to law, and its holiness to religion." Father Vaughan tells us the history of woman before the incarnation is a pitiful and painful proof that when she is not influenced by high ideals, instead of exercising her rightful influence of the destiny of man, she may incur man's bitterest contempt and scorn. With rare exceptions, woman under the Roman Empire kept slipping down lower and lower on the incline, till she is spoken of by the historian as "La divinite de la corruption." Seneca, too, speaks of woman as "a shameless animal," in whom men cannot see anything but the savage creature incapable of restraining its passion. We all know, in the time of Augustus, women became so degraded and debased that the very highest and noblest Roman families were dying out for want of heirs; while lower down the rounds of the social order, woman having lost her place in the family, self-inflicted extinction obtained far and wide, desolating whole provinces, and even Rome itself. "Thus were sapped the very foundations on which an empire rests her very life." As confirmation of Vaughan's words one can easily refer to the satires of Juvenal, who lived during the first century at Rome, and he tells us in Satire vi, 368: "Wealth like a leprosy the land has cursed, and all the sinews of her strength has burst!" Such are the conditions which exist in these our days, and he tells us: "Beneath the sun no daring so sublime as that of woman in the blaze of crime." Yes, if a Juvenal or Horace would arise he would notice the effects—the degenerating effects wherein "wealth accumulates and men decay."

If one in any sense were interested in the subject of womanly virtues and the corrupt tendencies of our age in which the so-called leaders of society and fashions are dethroning women in virtuous living, no better aids can be afforded than several ladies' journals whose pages are designed, apparently, to encourage thoughts and morals not conducive to the maintenance of the happy home life in which man is to be recognized as the husband and ruler; in fact, "He for God only, and she for God in him," as Milton writes, is

repugnant to the modern woman of the smart set, to her of the diamond-studded heel, and to her of the slitted skirts. Milton also writes: ." Eve, half embracing, leaned on our first father; half her swelling breast, naked, met his under the flowing gold of her loose tresses hid," and "for contemplation he and valour formed, for softness she and sweet and attractive grace."

Kipling's words are none too consoling in these lines:

> "Oh, the toil we lost and the spoil we lost,
> And the Excellent things we planned,
> Belong to the woman who didn't know why,
> (And now we know that she never knew why)
> And did not understand."

Was this want of understanding referrable to the query: Bridge or Babies? or to those queries: Lives of misery, of barrenness, or babies? Unfaithful homes or babies? Unhappy homes or babies? Hospital wards or babies, or Asylums or babies, or Suffragettes or mothers, or Husbandette or wife, or Courtesan or wife, Murderess or mother, Hell or Heaven, a harlot or Cordelia?

Had Sir Sidney Smith in view the woman—that art alone makes—when he wrote these lines?

> "His heart in me keeps him and me in one,
> My heart in him his thoughts and senses guides;
> He loves my heart, for once it was his own,
> I cherish his because in me it bides:
> My true love hath my heart and I have his."

Yes, "a woman's crown of glory should be her family, her throne—home; and her sceptre—affection," yet modern teachings as given at many girls' colleges, and by means of literature, so-called, of monthly and other widely spread journals for the so-called fashionable set, conduce more to sensuality and the development of the manly woman—the athletic woman, to whom no man of any intelligence wishes to give a home, his heart or his honored name. In two periodicals, found in many virtuous families—the names of which publications I need not name, as I am not a publisher's agent—one, who is interested in live stock, as is the farmer in the best bulls, stallions, rams and boars, the best milkers among cows, etc., can find the following description of a typical marketable woman in early years: Weight, 118; height, 61¾ (standing), 33½ sitting; girth of neck, 13½; of chest, 31½; of chest (full), 33½; of lower chest, 27½-29½; waist 23½; hips, 35½ (if not an athlete, 39 in. said Dr. Blanche Denny);

thigh, 21; calf (right) 13½; calf (left) 13½; of ankle, 8; of upper arm, 10¾; of forearm, 9½; of wrist, 6; breadth of shoulders, 15 inches. These are the measurements of the ideal athletic girl who is prepared (?) for motherhood, or to be a suffragist hammer striker or the man-woman.

"Lest the generation fail" I present the following from a corset and waist journal: "Height, 5 ft. 5 inches; weight, 128 lbs. From tip to tip of each middle finger just five feet and five inches, the same as the height. The length of her hand should be one-tenth of her height; her foot one-seventh, and the diameter of her chest one-fifth. From her thighs to the ground she should measure just the same as from her thighs to the top of her head. The knees should come exactly midway between the thigh and the heel. The distance from the elbow to the middle finger should be the same as from the elbow to the middle of the chest.

"From the top of the head to the chin should be just the length of the foot, and the same distance to the armpits. A woman of this height should measure twenty-four inches round the waist, thirty-four inches about the bust, if measured under the arms, and forty-three if measured over them. The upper arm should measure thirteen inches and the wrist six inches. The calf of the leg should measure fourteen and one-half inches; thigh, twenty-five, and the ankle eight." If these measurements had been found in another journal, I would not have made this copy or given them to my fellow subscribers.

According to Dr. Blanche A. Denny the weight of the perfect woman should be 8 stone 3 pounds, her height 5 feet 5 inches. Her waist 29 inches, bust 34 inches, hips 39 inches. "After all we must not consider her as a breeding machine and an adjunct to a frying pan," but God's masterpiece, or as our Sir (Dr.) Thomas Browne tells us that "man is the whole world, and the breath of God; woman the rib and the crooked piece of man."

In brief, as Sidney Low in *The Standard* has it, and which we —you and I—will endorse: "And man knows that woman is not fiend nor saint, nor mixture of the two, but an average human being—'most remarkably like you,' *'not* half mother-fiend, half Maenad, lest the generations fail, armed and engined,' fanged and poisoned, for the hunting of the male, 'with the morals of the hen coop, with the jungle's code of laws,' as described by Rudyard Kipling, after (some way after) Shaw:

Tis no doubt a graceful fancy,
But the Woman Time has made
Doesn't recognize the likeness
So ingeniously portrayed."

This presentation from abundant treasures of analecta and anthology affords many interpretations and many studies more or less directed to the great subject of motherhood—the true woman's crown of life and her divine mission from God himself.

Mother! is there in any language a sweeter word, or one that can more fully awaken our recollections of pleasant days? Yes, "the mother, in her office, holds the key of the soul, and she it is who stamps the coin of character and makes the being who would be savage, but for her gentle care, a Christian man; then crown her the queen of the world."

"As unto the bow the cord is
So unto the man is woman;
Though she bends him, she obeys him;
Though she draws him, yet she follows;
Useless each without the other."

—*Longfellow.*

ONE RESULT OF SUGGESTION.

By A. C. E.

"A fee of $10,000 will gladly be paid to any physician who will guarantee to cure a young lady of hysterical attacks, it being understood that the money will not be paid until a year has passed and there has been no recurrence of the attacks in that time. No one but a duly qualified physician need apply. Box 298, Express."

Jerrold Cunningham had just returned to America after doing four years' graduate work in continental, English and Scotch hospitals, rich in neurological knowledge but very poor in financial equipment.

His neat brass door-plate on an up-town fashionable boarding house where he was *en pension*, and where he occupied a suite of apartments which would soon land him in the poor house if he had to wait long for practice, proclaimed to passers-by and the community the particular specialty to which he would confine himself.

He was glancing casually over the advertising columns of his morning *Express*, when the above advertisement caught his eye.

"Would it be professional to answer that advertisement?" was the first thought which flashed through his mind.

He pondered the thought pro and con.

"I feel that I am competent to cure this afflicted young lady and bring joy and happiness to a worried and anxious household, as the knowledge I acquired in the German hospitals where I witnessed hundreds of permanent cures of this functional neurosis will serve me well now; and then there is not a specialist in diseases of the nerves in this entire city. Surely this is a case for me."

Thus he mused, but professional ethics would not down.

"Well," he concluded, "there will be no harm in waiting a day or so, and in the meantime I'll think it over. There will be sure to be lots of applicants, quacks as well as others. There can't be any one here who knows the value of and how to employ suggestion in the treatment of these cases. I'll wait."

So Dr. Cunningham put on his hat, drew on his gloves and taking up his walking stick sallied out to pay a visit to a case of neurasthenia he was then treating in the General Hospital.

After attending to his professional duties to this case, he betook himself to the operating theatre of the hospital, where he found the leading surgeon of the city performing a delicate operation in brain surgery, a branch of surgical science then in its infancy, as suggestive treatment was in the sister department of medical therapeutics.

A large concourse of physicians and surgeons were there gathered to witness this operation and Dr. Cunningham took a place amongst them to watch the outcome of the proceedings.

He had a few friends amongst the faculty there gathered and after the operation was over asked for an introduction to the distinguished surgeon.

The elder man soon engaged him in conversation relative to certain diseases of the brain and saw quickly that his younger confrere was a distinct acquisition to their professional ranks.

"Cunningham," he said on parting, "come over and see me to-night after office hours. I have a case I would like to talk over with you."

"Thank you," returned Cunningham, "I shall be delighted."

That evening found Jerrold Cunningham comfortably ensconsed in one of the surgeon's easy chairs puffing away at a very fine "imported."

"Well, how are you getting along on the nerves?" was the first sally from the surgeon.

"Nothing to boast of—you know, doctor, I have got to do a little waiting just like every other beginner."

"Yes, that's true," patronizingly replied the elder—"I had to go through the starvation process in this city about seven years

myself before I commenced to make a decent living; but never mind, it will come to you, my boy. We are hardly yet ripe for a specialist on diseases of the nerves here—the people are not yet educated to it, they still stick to the old family physician—but it is coming, and that, I think, shortly."

A few seconds' pause, the smoke curling above their heads.

"Now, I have a young lady patient," went on the surgeon, "a beautiful girl, twenty-two years of age, an only daughter of one of the oldest and wealthiest families in the city, who for the last three years has been simply ostracised from society, and, indeed, from her closest and dearest friends, through a common, yet what I consider a terrible, malady, although most physicians generally think and write lightly of the affliction. I will succinctly give you her history; and then, as you have but just returned from France, Germany and England, conversant with the latest ideas as regards the treatment of functional neuroses, you will no doubt be able to help me."

"Very well, proceed," and Dr. Cunningham settled farther down into the comfortable chair.

"Her father and I were chums at the university together and have been bosom friends all our lives. My eldest son and Isabel—I may as well tell you that her name is Isabel McKinley, the only daughter of the prominent wholesale merchant of that name—were engaged to be married, but on the eve of the marriage my son disgraced us by running away with a nurse who was attending on my wife with a very severe attack of typhoid fever. The shock was too much for Isabel's nerves, as, indeed, how else could it be? And she has been the subject of hysterical fits ever since, often several in a day, although this is not continuous from day to day. I have tried all the known remedies with her with no avail, and on my advice other physicians have been called in with like result. I am afraid now that McKinley has about lost all faith in me—and little wonder—and I am just about as distracted over the case as he is. Is there anything new for hysteria?"

"Yes, I think it probable that she can be cured entirely."

"Doubtless you read in this morning's *Express,*" continued the surgeon, unheeding the younger man's remark, "an advertisement which McKinley had inserted contrary to my wishes and advice, in which a large reward was offered to any physician who could promise a permanent cure."

"Yes, I did," replied the young neurologist.

"Did you answer it?" queried the surgeon, watching his confrere out of the corner of one eye.

"No," hesitatingly—"I was doubtful of it being professional."

"That's right. Never promise to cure anything either for or not for reward. Treat your patient and claim a proper fee. That is the pith of honor in the practice of medicine and surgery. Do you think there is any possibility of a permanent cure?"

The specialist sat up and leaned forward, deep earnestness marked in his aspect. "I said a moment ago I thought it probable—I now say I am almost positively sure of it."

"What is it?"

"Suggestion."

"Suggestion—what's that? Oh, yes; I remember now—I think I have read of that in *The Lancet*—but is it successful?"

"Quite so. I have seen many cases cured in the French and German hospitals. It is used there quite extensively, although it has not been tried here in America yet."

"I will arrange a consultation at the McKinley residence in the morning and will send a messenger to you at what time to meet me."

At ten o'clock the following morning Dr. Cunningham was ushered into the library of the McKinley mansion to meet the father of the beautiful girl, so afflicted, and who was probably about to become his patient. The family physician was already there and came forward to introduce him to Mr. McKinley.

"I have a number of letters here—the case of our daughter, my doctor informs me, Dr. Cunningham, has already been explained to you—which give me hope. Several promise me permanent cure and ask for an opportunity to see the patient. Now, the doctor has informed me that you are a specialist in nervous diseases who has been trained in Europe, and who for the past four years have been abroad studying diseases of this character and others. Will you promise to cure my daughter? I would rather engage a physician on the recommendation of my old friend here, but, indeed, sir, I am almost distracted and have about lost control of my judgment in this matter."

"I cannot promise to cure your daughter, Mr. McKinley, because I haven't seen her yet, nor do I know for myself the nature of her malady or the cause of it, although your family physician here has put me in possession of a good many facts in the case."

The haughty millionaire was rather rebuffed at this answer, but withal rather pleased with the dignified manner of the young practitioner.

"Then there is no use continuing this interview," he said—

and turning to the surgeon and handing him a bundle of letters asked: "Which of these do you think we had better engage?"

"The young man is right, McKinley, you should have nothing to do with any of these who claim that they can cure Isabel. All that any honest man can do is to treat her and await results. Dr. Cunningham says that he has seen many of these patients permanently cured and I believe him. I pray that you will permit me to introduce him to the patient."

"Very well! You may have your way once more, but remember this will be the last time I will take your advice in the matter," and Mr. McKinley turned and walked out of the room.

"You must not mind him, Cunningham, for he is overburdened with grief at his daughter's condition. Come with me."

Dr. Cunningham had never seen a more beautiful girl, and trained observer as he was he immediately detected marks of great mental strain. He saw at once by the action of the grief muscle of Darwin that his fair patient was bordering on melancholia.

He advanced and extended his hand to acknowledge the introduction, when the patient promptly fell into a violent spasm to all appearances hysterical in character.

A few drops of restorative and the patient was herself again, and the specialist soon engaged her in an animated conversation upon various topics.

It was at length arranged that Isabel should be taken to a private ward in the General Hospital, completely isolated from all her friends, attended only by her nurse and Dr. Cunningham.

Two weeks passed and Dr. Cunningham was not able to report to Mr. McKinley that his patient had made much progress.

Another week passed and the parent began to be doubtful.

A fourth came and went, and the family physician came to see Dr. Cunningham.

"I am afraid you are going to fail," he said.

"Wait and see," was the self-satisfied reply.

"But McKinley is getting very impatient. He says it is the old story—talks of extortion and wasted money. What are you doing for her anyway?"

"Simply improving her general condition by tonics and diet."

"Bother! I've tried that time and again. It's no use. What's become of your suggestion?"

"All will be in readiness for that next week. Of course, I acknowledge if it fails she is done for and so am I—in this city. Have a little more patience and bolster up her parent. I am sure all will come right in the end."

Dr. Cunningham saw his patient two, three and sometimes four times a day. He was, indeed, vastly interested in both the patient and the case.

Isabel McKinley was very submissive and the nurse reported to the doctor that she thought she rather looked for his visits. At the same time she would watch his countenance for any tell-tale appearance thereon, but the calm exterior of the specialist betrayed nothing. His nerves had been well schooled. To him Isabel McKinley was apparently nothing more than any patient would be under similar circumstances.

The day for the application of the suggestive treatment at length arrived.

Dr. Cunningham sent word to Mr. McKinley that on the morrow he would accomplish a cure or return his patient to her home—and he a vanquished man.

Arriving at the hospital at 8 o'clock the following morning, he ordered the nurse to prepare the patient as for an anesthetic.

Her attacks had not been so frequent during the past week and the intervals between attacks had been lengthened.

"Miss McKinley," addressing her, "I am going to put you to sleep and I do not wish you to resist the influence. I wish you to aid me all you can, in fact, I wish you to try to go to sleep yourself."

A few deft practised passes over the temples and down the finely moulded arms to the finger tips—and the patient was in the hypnotic trance.

"Run, quick, nurse, and bring me a tongue depressor!"

When the nurse ran out of the room, he stooped down close to the ear of the beautiful girl and spoke therein in firm, earnest tones: "Isabel McKinley, you are cured. You will never have any more fits. There has come into your life a man who loves you and who is worthy of your love. Love him as he loves you. Your life will be forever happy."

The nurse returned with the instrument.

"I was afraid," breathed Dr. Cunningham, "her tongue would drop back, so I wanted to be in readiness for any emergency of that sort."

Turning to the patient again: "Miss McKinley, you are cured! Awake!"

A few passes over her eyes and the patient began to come to and almost immediately sat up in the bed.

"Oh, Dr. Cunningham, I have had such a lovely sleep! I have not slept so peacefully in years."

"You must be quiet now and rest," was all he said.

The day passed—no attacks.

A second, a third, and the doctor was satisfied.

In two weeks Dr. Cunningham returned Isabel McKinley to her home and that home was once more a happy one.

Two years passed away. Dr. Cunningham sent his bill to Mr. McKinley in due and proper time for his services, and a check was promptly returned together with another for $10,000 as a thank offering for the great blessing in returning to her home an afflicted child long a source of worry and anxiety to her parents. The cure remained complete; and the clever neurologist, now in the enjoyment of an ever-increasing practice, was often thrown into the society of Isabel McKinley, but, remembering her former experience, was chary of love-making.

The surgeon often joked Jerrold about Isabel and said he should marry her.

"I'll fix it," he said, but not quite in the way probably that he had forethought.

Jerrold fell sick of typhoid fever of a pronounced cerebral type; and the old surgeon was sent for to attend him. He impounded Isabel to nurse him; it was only fair, he said.

After two weeks' of delirium, Dr. Cunningham came to his senses, very weak 'tis true, and found Isabel bending over him.

"You here, Isabel—I mean Miss McKinley?"

"Yes. There has come into my life a man who loves me, and I love him as well as he loves me—but you must rest now—you must not get excited"—and she smiled sweetly down upon him and then placed her soft hand over his mouth and made him keep quiet.

She had divined it all through his delirium.

DENTAL PROPHYLAXIS IN CHILDREN.*

By J. A. Bothwell, D.D.S.,
Surgeon to the Hospital for Sick Childrens.

Prophylaxis is the art of preserving from, or preventing, diseases. It is not a curative, but a preventive, process.

From a dental standpoint, Prophylaxis is considered an elementary operation, and is necessarily so because it is the first operation when patients place themselves under our care for treatment—the alleviation of pain only being excepted. It is important to make this a very thorough operation.

Caries or decay is the result of non-prophylactic measures. It is caused by the formation of gelatinous plaques on the surfaces of the teeth. These plaques protect the bacteria and enable them to dissolve out the lime salts between the enamel rods of the tooth and finally break down the enamel rods themselves, producing cavities.

The first requisite to prevention is a healthy, perfectly formed organ, one which has all the virtues of good articulation, ample blood supply and normal environment. Too little attention has been given to the early habits of mastication as well as the character of food which the children receive from the age when permanent molars begin to erupt. There can be no development without a proper and adequate blood supply. This cannot be had without proper exercise, and this exercise will not be had until the children are taught to thoroughly masticate good hard foods instead of the soft preparations usually offered them.

The immediate effect of such exercise is to increase the circulation in all the surrounding tissues, insuring a better growth, a more resisting organ, and a healthier action of the salivary and mucous glands. The ordinary diet contains a sufficient amount of calcium salts and other ingredients to form a perfect set of teeth if it could only be properly placed, but how can the child masticate its food if the deciduous teeth are defective. Not only are they unable to do so, but habits are being formed which cling to them long after the loss of the deciduous teeth. This constitutes a demand for more careful attention to children's teeth.

All investigations point to vitiated oral secretions as a prime

* Read before the Academy of Medicine, Toronto.

factor in dental caries—correct the secretions and preserve the teeth. When we are able to determine a normal saliva we will have made a big stride forward.

Frequently we find cases among children of certain ages with a vitiated saliva, where decay is rampant. This condition is easily detected by chalky milk-white spots on the enamel and may usually be remedied by a prescription supplemented by Prophylaxis.

Micro-organisms are to be constantly combated. Can the oral cavity be made sterile? Most certainly not, but we can reduce the numbers and activity of the micro-organisms by limiting their food. An intelligent appreciation of this fact will do much to establish the daily routine of careful mechanical removal of all traces of food with brush, dentifrice, floss, silk, etc.

Cleanly habits are part of the education of every individual and can be found best in early childhood. The mouth is the gateway through which all food must pass on its way to the body, and too much stress cannot be bestowed on this important subject of oral prophylaxis for the sake of the little ones. A little water used frequently for rinsing with a motion of the tongue on all surfaces of the teeth and gums, lingual, palatal, labial and buccal, goes a long way to assisting in this prevention, and this prevention should be our highest aim.

Salivary calculus and green stains, the latter of which is most common in children, when the mouth is open, will disgust the beholder, and frequently prevent the formation of a favorable opinion of the child who is so neglectful of his or her appearance. Nothing adds so much to personal appearance as a clean set of teeth. As an example to our patients, how necessary it is then for a dentist or medical man to present a clean set of teeth at all times.

Germicidal mouth washes are very much estimated because they are usually in the mouth such a short time, and so are practically useless. Their principal virtue is that they are an incentive to the patient to clean the mouth because of the pleasant taste.

From the earliest days down to the present time in the human race, men have searched for the spring of health, hoping thereby to find some source of eternal youth. Our patients come in the same manner, asking, "Doctor, what can I do to make and keep my teeth clean and preserve them from decay?" This question comes over and over again. We would write a prescription if such were possible, but there is no specific.

Sometimes a dentist does prescribe a wash and gives instructions with it. What is the result in a large majority of cases? The patient forgets the instructions and uses the wash, thinking he has a specific without labor, but in a short time he finds dire results. Every wash should be accompanied by careful instructions as to its use, which should be minutely followed. They are usually prescribed in cases of inflamed mucous membranes and gum tissues, where the inflammation does not recede even after the irritant has been removed. They should be used only for a short period, for in a few weeks they lose the desired effect on the tissues.

Tooth pastes and powders are valuable in the cleansing of the teeth and mouth, and particularly so if the saliva is inclined to be sticky or ropy. They should contain a reasonable amount of fine grit—preferably a grit soluble in the fluid of the mouth. A small amount should be placed upon the brush in the cleansing process. One should see to it that all particles of paste or powder are entirely eliminated from the mouth by thorough rinsing afterwards with pure water.

Tooth brushes should be of the proper size and shape, so that one may cleanse every surface of every tooth of both jaws. In the majority of mouths two brushes at least are necessary, a labial and a lingual brush. For children under seven or eight years of age, a small brush with one row of bristles, as the "Hutax" child's brush, is strongly recommended. For all over that age, I think there is none better than the medium-size Hutax brush for all labial surfaces and the lingual brush for lingual surfaces. I have used a great many different brushes and have yet to see one that can compare favorably with the Hutax. They are properly shaped, so that every surface of every tooth may be reached.

I saw an article on oral conditions read before this society in October, in which the writer suggested three ways of remedying evils he perceived in the use of a tooth brush for many mouths.

1. All tooth brushes should be boiled before and after use for five minutes.

2. Use a new tooth brush every day.

3. Rinse brush in trikresol 1 per cent. or stand in formalin 10 per cent.

In the first place the boiling of the brush is impracticable or would soon destroy it. Secondly, a new brush every day is too expensive for the average person, and thirdly, the soaking in solutions would destroy and soften the bristles to such an extent that they would not do their work any great length of time. However,

as we are immune to our own bacteria, we need not be alarmed, and if our brush is given a chance to dry between usages the bacteria do not get much chance to grow, as they need moisture, and the bristles, being dry, will be stiffer and better able to do their work. I strongly recommend the use of three or four brushes for each individual to be used consecutively, so that a dry brush is always ready for use. They will last longer if so used and so ultimately cost less. If only one brush is used, it should be stood on end in a good place to dry quickly, so it will be always ready to do its work. A soft, flabby bristle cannot do good work.

The teeth should be brushed from gums down over the crowns of the teeth, so that the bristles extend well in between the proximate surfaces. If this is done on the labial, buccal and lingual surfaces, together with the thorough rotary brushing of the occlusal or grinding surface, every surface of every tooth will be pretty thoroughly cleansed. This cannot be properly accomplished in less than from three to five minutes.

The teeth should always be brushed upon rising in the morning, so that the bacteria that have developed during the night may not be taken into the stomach with the breakfast. Brush after each meal. It is very important to brush the teeth before retiring, so that no particles of food will have a chance to lie around the teeth and ferment, thus giving the bacteria a good opportunity to set up caries.

The object of all this care is primarily to save the teeth; secondly, to prevent infection in the alimentary canal, and, thirdly, to prevent the spread of infectious diseases. We are told that 95 per cent. of all tuberculosis infections take place through diseased or ill-kept mouths. The same is true of almost all other contagious or infectious diseases.

Besides these diseases such conditions as enlarged glands, inflamed tonsils, septic catarrh of the stomach, indigestion, pernicious anemia, deafness and many other serious conditions are directly or indirectly traceable to insanitary mouths.

I have been requested also to say something about the examination of children's mouths, but can only lightly touch upon it here.

In the examination of children's mouths, or in fact, any mouth, it is well to have a routine to follow. In this connection the following order is good: Lips, cheeks, mucous membrane, gums, general condition of mouth, clean or unclean, abscesses, regular or irregular teeth, number of temporary teeth, number of permanent teeth, and, finally, cavities in temporary and permanent teeth. This becomes a habit with the dentist and he sees practically all at a glance.

Here we might note that in all children of six years and over we are almost sure to find permanent teeth, and these should have special care in examination, as they are likely to be on duty a long time. The tooth which is so often lost is the first permanent molar. It erupts at six years of age, immediately behind all of the temporary or milk teeth. It has prominent cusps, three in the occlusal surface next to the cheek and two on the occlusal surface next the tongue. It has a solid color as compared with the temporary teeth, which are somewhat of a dead white.

When one has several patients to examine, it is a good rule never to touch the body or face, and particularly the mucous membrane of the mouth, with the hands, lest infection be transferred from one patient to another. Physicians are not always, I fear, as particular about this matter as they ought to be. I have seen physicians on several occasions insert their fingers in the mouths of several children and never wash their hands during the whole examination.

To avoid this very bad practice, one can make a very fair examination with only a flat wooden tongue depressor, such as used in the hospitals. Usually in ward use, where more than one patient is examined, I use two mirrors, 10 per cent, formaldehyde, sterile water and tongue depressors. One mirror is kept in the formaldehyde while the other is being used in the examination of one child, about five or six minutes. The water is to wash off the formaldehyde before being used again. A tongue depressor is used only once and goes to the pus basin to be destroyed.

Any inflammation of the mucous membrane is quickly noticed. Green stains and other stains are easily recognized, and decay in the teeth is usually marked by a hole in the tooth or dark black area on the surface. In closing, I hope that this paper will give every man present a few real practical working points. I thank you for your kind attention.

THERAPEUTIC TIPS

Cerebral Hemorrhage.

F. X. Callaghan (*Medical Press and Circular*) says the routine treatment of cerebral hemorrhage is absolute rest, depletion of the circulation by vigorous purgation, and attempting to prevent complications, such as bed sores, cystitis, and aspiration pneumonia. In cases of marked compression, evidenced by prolonged and deep coma, slow pulse, irregular breathing, the intracranial tension should be lowered by venesection, lumbar puncture or decompression, with or without an attempt to remove the clot of blood.

Olive Oil in Diseases of the Stomach.

Freeman (*American Medicine*) reviews the history of the treatment of diseases of the stomach with olive oil. This has been advocated at times for the past twenty years. Penzolt noticed that after drinking coffee with cream gastric acidity was lower than with coffee alone. Ewald and Boas in 1886 showed that when starch oil mixture was introduced into the empty stomach there was very little, if any, secretion of hydrochloric acid in the first half hour. In 1898, Strauss and Adler used liquid fats in patients afflicted with various conditions associated with gastric hyperacidity, with satisfactory results. About this time Pawlow and his associates showed that fats did not show any stimulating effects upon gastric secretion, but had an inhibiting influence on secretory processes excited by other foods. Bachmann, in 1900, claimed to reduce free hydrochloric acid 19 per cent. by butter and as much as 42 per cent. by cream. Then Cohnheim employed olive oil with good results in cases of hyperacidity, finding that it fulfilled four conditions: Relief of pain, reduction of friction, as a food, for the inhibition of acids. Moore and Ferguson, in 1909, demonstrated fats had a depressing action on the activity of the normal flow of gastric juice. Permanent cures have been reported from the oil treatment in cases of spastic stenosis, fissure and erosion of the pylorus, ulcer, and gastritis. Reports of results justify the use of fats,—olive oil, butter, cream, in cases of nervous dyspepsia and gastric hyperacidity from many causes. It is simple and harmless.

Post Partum and Hysterical Retention of Urine.

Edwards (B. M. J.) states these cases are very generally relieved by the administration of an enema.

Sweating Feet.

G. Norman Meachen (*Practitioner*) says to bathe the feet well every night, using a one per cent. solution of pot. permang. warm; then dry thoroughly. The following morning dust in this powder: Pot. permang., drachms, two; powdered alum, grains twenty; talcum powder, ounce one; precipitated zinc carbonate, zinc oxide, of each, half a drachm.

Colon Bacillus Infection.

Kemp (*Bost. Med. and S. J.*) gives urotropin and sodium benzoate, of each, ten grains, every three hours, by the mouth. If coma is present, or vomiting, he gives it by the rectum. As to diet, he gives sour milk and later cereals, etc. No red meats. Calomel or blue mass for the bowels.

Gonorrhea.

Menzer (*Mün. Med. Wochen.*) uses injections of gonococcus vaccines in the treatment of acute gonorrhea, together with hot sitz baths, and rest in bed for two or three weeks. He particularly emphasizes the importance of the latter.

Pruritus vulvæ.

R. A. Gibbons (B. M. J.) considers the treatment under three heads: internal remedies, external remedies, and operation. Under the first, regulation of diet, bromides and similar drugs. Externally he uses antipruritic lotions or ointments and soothing sitz baths, such as bran bath. He has found a five per cent. solution often serviceable; liquor potasse and solutions of either corrosive sublimate or subacetate of lead. Menthol, 5 to 20 grs. in solution rarely fails. Nitrate of silver, 40 grains to the ounce in long standing cases is valuable. Operative measures recommended are some form of cautery or division of nerves.

Reviews

Health and Medical Inspection of School Children. By Walter S. Cornell, M.D., Director of the Medical Inspection of Public Schools, Philadelphia; Lecturer on Child Hygiene, University of Pennsylvania; Director of Division of Medical Research, New Jersey Training School for the Feeble-Minded, etc. Illustrated with 200 Half-Tone and Line Engravings, many of them original. Philadelphia: F. A. Davis Company.

Medical inspection and medical supervision of school children has, within the past few years, attained to such prominence that any book of an authoritative nature will be made welcome by the medical profession, particularly those intimately associated in this laudable work. In a volume of 614 pages one would think that at the present time the last word had been written on the subject. The experience of the author has been such that he is qualified to record his observations and work in book form, and it will remain for some time to come the best authority in a general way on the subject of medical inspection of schools. We heartily recommend this book.

American Journal of Surgery.—Greater New York Number.

In June the *American Journal of Surgery* will issue a number composed of original contributions from men of recognized prominence in the medical profession residing in Greater New York. Among those to contribute are:—Herman J. Boldt, C. N. Dowd, Meddaugh Dunning, Wm. S. Gottheil, E. L. Keys, Jr., Howard Lilienthal, Chas. H. May, Willy Meyer, Robt. T. Morris, S. Lewis Pilcher, John O. Polak, James P. Tuttle, James P. Warbasse and others. Contributions from these well-known men should make this issue of particular interest and value.

An Introduction to Therapeutic Inoculation. By D. W. Carmalt Jones. Toronto: The Macmillan Company of Canada. $1.25 net.

This is an excellent summary of the principles and practice of vaccine-therapy, based upon the large experience of the author

and that of other investigators, from whose work he has freely drawn. Its especial merit, however, is that the author dwells particularly upon his own methods and gives succinctly and without undue enthusiasm the results of a number of years' experience. If any criticism should be offered such an excellent monograph it would be that directions for the use of bacterial vaccines that should guide the general practitioner are perhaps not sufficiently detailed or explicit to meet his needs. G. W. R.

Principles and Practice of Physical Diagnosis. By John C. DaCosta, Jr., M.D., Assistant Professor of Clinical Medicine, Jefferson Medical College, Philadelphia. Second Edition, revised. Octavo of 557 pages, with 225 original Illustrations. Philadelphia and London: W. B. Saunders Company, 1911. Cloth, $3.50 net. Canadian Agents: J. F. Hartz Co., Toronto.

This Physical Diagnosis of DaCosta is a satisfactory work on the physical examination of the chest and abdomen, and it may be recommended to those who have a large library of these diagnostic methods, but who require a smaller book for quick reference and for the few recent additions to this science.

But while the separation of the physical and chemical methods of examining patients has the advantage of preventing the editing of a bulky volume, yet it seems hardly wise to exclude all mention of the technique of studying the nervous system,—a physical not a chemical examination.

So that while this book is excellent as regards its contents, yet it is not suitable as a text-book for the student, who requires to find his library of physical diagnosis in one, not in several volumes; nor is it suitable for the general practitioner, who I think can invest more satisfactorily in a more complete work.

G. W. H.

The Treatment of Fractures by Mobilization and Massage. By James B. Mennell, M.D., B.C., Cantab., etc. Late resident Medical Officer of St. Thomas' Home, etc. With introduction by Dr. J. Lucas-Championnière, Honorary Surgeon to Hotel Dieu, etc. Price, $3.50 net. St. Martin's Street, London: Toronto: The Macmillan Co. of Canada.

This is a very exhaustive work of over 450 pages, profusely illustrated, on this, to most of us, new method of treating fractures. Gentle massage—"glucokinesis"—is recommended as pre-

liminary- and after-treatment, while by mobilization is meant gentle movement of the parts. Taking as an example, "a recent fracture of the surgical neck of the Humerus, the treatment is limited on the first day to free movements of the fingers and wrist, half movement at the elbow, and only such movement at the shoulder as is unavoidable during these manipulations. But in a week's time abduction, flexion and extension of the arms should reach 50 per cent. to 75 per cent., and a minute amount of rotation may be called for in suitable cases. . . . There is only one limit to the amount of this dose; it must cause no pain. . . The use of splints is not to be altogether abandoned in the treatment of the majority of fractures. As soon as possible splints are discarded, though it is often necessary to leave them *in situ* for a short space."

The author has naturally had a very wide experience, and a careful study of his work will amply repay any practitioner.

T. B. R.

Minor and Emergency Surgery. By Walter T. Dannreuther, M.D., Surgeon to St. Elizabeth's Hospital and to St. Bartholomew's Clinic, New York City. 12mo. volume of 226 pages, illustrated. Cloth, $1.25 net. Philadelphia and London: W. B. Saunders Company. 1911. Canadian Agents: The J. F. Hartz Co., Toronto.

A useful little work, intended more particularly for the hospital Interne. T. B. R.

Principles of Anatomy. The abdomen proper. Described and illustrated by text and plates. By Wm. Cuthbert Morton, M.A., M.D. (Edin.) Price $12. New York: Rebman Company.

This work consists of a 175-page book and 27 plates, on 14 leaves each of 10 by 14 inches. Thirteen of these plates are front-and-back plates in which the abdominal organs have been outlined and a portion within the outline has been cut out.

The method of employing these plates is (1) by separate inspection from in front and from behind and the relations of the various structures seen. (2) By simultaneous inspection, by trans-illumination. (3) By correlating the front-and-back plates with each other, separately, and by combined inspection by means of cut-out leaves, and by simultaneous inspection by trans-illumination. In this manner each organ can be studied completely

as regards its surface anatomy, its relations, its blood and nervous supplies.

The object of the work is intended to "stimulate practical study, to be used before dissection for a preliminary survey, during dissection for comparison and contrast, after dissection for revision, and at all times for reference."

It is necessary to study the text and the plates in conjunction. "Certain changes have been made in treatment and in nomenclature." These changes only serve to make some of the more difficult parts easier of understanding.

The whole is most original and will certainly be a great aid to all in the study of the abdomen. W. A. S.

Fourth Report—Wellcome Tropical Research Laboratories. Toga Publishing Co., 35 West Thirty-third Street, New York City, and 101 Coristine Building, St. Nicholas Street, Montreal.

The Toga Publishing Company has been authorized, on behalf of the Department of Education of the Sudan Government, to issue the fourth report of the Wellcome Tropical Research Laboratories at the Gordon Memorial College, Khartoum.

It is almost impossible to exaggerate the importance of the work which is being accomplished by the distinguished group of scientific men associated with the Wellcome Tropical Research Laboratories, under the leadership of Dr. Andrew Balfour.

The thorough examination of the conditions of tropical life, as they present themselves in men, animals, plants and insects, is the task to which this great institution is devoted.

The Fourth Report of the Laboratories, which is now being issued, contains the facts, observations and discoveries brought to light during the last few years. Unlike the commentaries and digests which are so familiar a feature of the scientific press, these volumes contain the actual record, at first hand, of new contributions to the solution of problems of deep and world-wide import.

Their value is further enhanced by the superb manner in which the knowledge, so laboriously gained, has been presented and illustrated. The expansion of the work of the Laboratories and the amount of new material collected during the last few years have rendered it impossible to issue the Fourth Report in one volume, and the subject matter has, therefore, been divided into two parts. The first part, Volume A, of which a compli-

mentary review copy is being sent herewith for your acceptance, deals with the medical aspects of the work of research. Volume B, which relates to general science, is now in the press, and will be issued shortly. Volume A presents the results of the bacteriological examinations carried out at the Laboratories. Pathological and other specimens from a wide area, and illustrative of many forms of endemic disease, have been the subjects of investigation. Important papers have also been contributed on the work of the Sleeping Sickness and Kala-azar Commissions. The fallacies and puzzles met with in the course of blood examination in the tropics form the subject of an interesting and well-illustrated article. An extended research on fowl spirochætosis has demonstrated the important rôle played by the "infected granule" in this disease. Other papers include records of work on trypanosomiasis, human spirochætosis, kala-azar, forms of cutaneous leishmaniasis, veldt sore, diphtheria, human botryomycosis, veterinary diseases, etc. The interesting notes contained in the previous reports on sanitation in the Sudan are continued.

The two volumes of the Report, (A) and (B) together, contain 738 pages of letterpress and illustrations, many of the latter being in natural colors.

The price fixed for the Reports is as moderate as is consistent with the great cost of production, and any profit made will be devoted by the Sudan Department of Education to a special fund for future publications of the Laboratories.

In order to place the reader completely in touch with the latest phases of the whole subject, a third volume has been added as a supplement. It is entitled "A Second Review of Recent Advances in Tropical Medicine, etc."—a title which is amply fulfilled in the contents.

The last Reports were issued in 1908, and the announcement that a further instalment of the work was to be expected has aroused the keenest interest among students of tropical medicine and a very large demand is anticipated.

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COMMENT FROM MONTH TO MONTH.

The Report of the Royal Commission on Vivisection appointed some years ago by the British Parliament, has recently been issued. It is some four years since the evidence was concluded before the Commission, which time it is understood was consumed by the business of agreement among the Commissioners, illness and even death in the case of two of the Commissioners contributing to the delay.

That the entire matter has been well gone into and that every phase of vivisection has been carefully considered, the evidence carefully and judicially sifted and the findings made commensurate with all the evidence taken, may well be understood, when it is known eighteen months were given over to the hearing and that 21,761 questions and answers engaged the attention of the Commissioners.

During these five and one half years medical science, however, was not standing still awaiting the verdict. Flexner was busily engaged upon spotted fever and infantile paralysis. The mortality from sleeping sickness was being cut into by Bruce. In India, Leishman was producing good results with antityphoid inoculation; and nearer home, Wood of the United States had made this protection compulsory in the army upon all under forty-five, unless they had previously suffered from typhoid fever. France, too, was marching abreast of the times in scientific attain-

ments, and had to its credit 401 cases of rabies in 1911 without one death, having previously recorded a similar history and achievement for 1910. Diphtheric antitoxin reduced the death rate in England in laryngeal diphtheria from 60 to 11.7 per cent. None of this confirmatory evidence had the Commission before it.

Originally composed of ten members, it is decidedly gratifying to the exponents of vivisection that the report is signed unanimously by the surviving eight, and that, therefore, there is no minority report.

Every opportunity was given the opponents of vivisection to produce evidence in support of their views and contentions, and they made a wholesale failure all along the line. Eighteen of these witnesses appeared to give evidence antagonistic to the cause, and some of them were examined at great length, one being under the limelight three whole days and a half.

One clause in the report is so convincing that it is here set forth *verbatim et literatim*: "We desire to state that the harrowing descriptions and illustrations of operations inflicted on animals, which are freely circulated by post, advertisement, or otherwise, are in many cases calculated to mislead the public, so far as they suggest that the animals in question were not under an anesthetic. To represent that animals subjected to experiments in this country are wantonly tortured would, in our opinion, be absolutely false."

The achievements of medical science through animal experimentation need only to be mentioned in a categorical way: diphtheria, rabies, malaria, yellow fever, Malta fever, plague, lockjaw; the work of Lister; in the animal world, anthrax, rinderpest, Texas cattle fever, glanders, swine erysipelas, malignant jaundice in dogs, distemper in dogs.

But to the public apparently the great question is the one of pain to the animals experimented upon. With anesthetics complete insensibility to pain results. Morphia, chloral and like drugs, when used in heavy doses, produce a similar condition. Considering, then, that 95 per cent. of all experiments upon animals in Great Britain are inoculation experiments alone, and that these are done upon such animals as mice, rats and guinea-pigs, the question of pain does not appear to loom at all large, is in fact infinitesimal under the conditions. A great majority do not suffer any pain at all, although some inoculations do cause some pain.

The Commissioners have come to the conclusion and are unanimously agreed "That experiments upon animals, adequately

safeguarded by law faithfully administered, are morally justifiable, and should not be prohibited by legislation."

Surely then, the public, when it comes to humanity against mice, rats, guinea-pigs or even dogs, will say humanity overwhelmingly wins.

The role of raw foodstuffs, such as garden vegetables and fruits, is now having consideration in the dissemination of typhoid fever.

In a recent number of the United States Public Health Reports, R. H. Creel records some of his experiences in connection with raising radishes and lettuce on soil infected with the *Bacillus typhosus.*

His experiments go to show that plants will carry up with them in growing, upon the leaves and stems, micro-organisms which were in the soil subsequent to seeding.

It was found that the *Bacillus typhosus,* even where the leaves and stems were free from all apparent adhering particles of dirt, could be recovered from those selfsame leaves and stems; and that neither the natural rainfall nor tap water freed the infected plants from the germs.

Creel draws the conclusion, therefore, that the fertilization of garden soil by human excreta is productive of danger, in that such vegetables as radishes, celery and lettuce, may carry the infection direct to the alimentary tract of the human being.

This will mean additional activities for the health officer and his inspectors, or else it is good-bye to our luscious salads, the appetizing radish and the palatable celery stalk. We will require to know hereafter if these edibles are grown upon ground where night-soil figures as a fertilizing substance.

Hygiene of the mouth, or oral prophylaxis, is rapidly becoming a routine practice in the prevention of disease.

Pharmaceutical houses with keen business instincts are not slow in seizing hold of any new idea which can be turned to practical account; and there are already on the drug and medical markets numerous solutions, tablets and lozenges adapted to the conservation of health through the medium of the buccal cavity.

A British physician, William Hunter, has been especially prominent in this direction of preaching cleanliness of the mouth, and has exhibited a "sticktoitiveness" which is very commendable. Neglect of hygiene of the mouth, in his opinion, results in

numerous disorders, or at least helps to contribute to them, such as gingivitis, dental necrosis, stomatitis, deposition of tartar, suppuration around decayed teeth, periostitis, alveolar abscess, osteomyelitis, maxillary abscess, tonsilitis, pharyngitis, otitis and glandular enlargements. An unclean mouth may also have considerable to do with anemia and gastric catarrh.

In mouth hygiene, the dental profession seem to be in advance of the medical profession and have blazed the way for the proper employment of the tooth brush and intelligent and right, up-and-down brushing.

As the night time, the sleeping hours, is known to be the favorable working hours of the little pests, the micro-organisms, the importance of the buccal toilet just prior to retiring cannot be too often nor too strongly emphasized.

Dominion Registration advances apace. The Legislature of the Province of Quebec has passed the necessary measure to ratify the Roddick Bill, or the Canada Medical Act, as amended at the last session of the Federal Parliament. Ontario has introduced into its Legislature the "enabling clause"; and within a short time the complete success in rounding out Dominion Registration will be accomplished. It is not expected Ontario will prove a stumbling block.

When all the provinces have ratified the Canada Medical Act, the Honourable, the Minister of Agriculture will undertake its administration.

An organization meeting will be summoned and convened for Ottawa, when the Dominion Medical Council will be organized.

The much desired end approacheth. Dominion Registration was first broached before the Canadian Medical Association, shortly after its organization at the time of confederation. As the Dominion increased by the acquisition or accession of new provinces and new territory the question took on a wider scope. It dragged along until Dr. Roddick took it up in real earnest about fifteen years ago, and in order to further it before the Canadian Parliament, sought election to the House of Commons.

The history of Dominion Registration since that time is familiar history. It lapsed for a time after the passing of the original bill in 1892, but took on a new lease of life at Winnipeg in 1909. Its resuscitation has made it a live question again since 1909.

Reward for his earnest efforts is soon to perch on the indefatigable and able shoulders of Dr. Roddick, who may be saluted as the Father of Dominion Registration.

The Seventeenth International Congress of Medicine to be held in London, England, August 6th to 12th (1912), has issued its preliminary programme. The subjects for discussion embrace Anatomy, Physiology, General Pathology and Pathological Anatomy, Chemical Pathology, Bacteriology and Immunity, Therapeutics, Medicine, Surgery, Orthopedics, Anesthetics, Obstetrics and Gynecology, Ophthalmology, Diseases of Children, Neuropathology, Psychiatry, Dermatology and Syphilography, Urology, Rhinology and Laryngology, Otology, Stomatology, Hygiene and Preventive Medicine, Forensic Medicine, Naval and Military Medicine, Tropical Medicine and Hygiene, Radiology.

A very comprehensive programme is embraced under these headings. Canadian practitioners going abroad this summer should remember to time their visit, so as to take in this important conference.

Ontario Medical Association—Toronto, May 21, 22 and 23. This meeting is to be far more clinical and practical than any yet held.

Draft Programme of Ontario Medical Association, to be held in Toronto on May 21, 22 and 25.

Tuesday, May 21.—

9.00. Symposium on Graves' disease.
9.00. Address in Medicine, by Dr. Alden Turner. London, Eng.
3.00. Meeting of Sections.
8.00. President's Address, by Dr. H. A. Bruce.
9.00. An illustrated lecture on Experimental Medicine, by Prof. Carell of the Rockefeller Institute.

Wednesday, May 22.—

9.00. Clinics at the University Buildings.
1.00 Luncheon in the Quadrangle.
2.00 Address in Surgery.
3.00 Meeting of Sections.
7.00. Dinner at McConkey's.

Thursday, May 23.—

9.00. Clinics at the various Hospitals.
2.00. Woodbine Races and Golf.

News Items

Dr. S. H. McCoy, of St. Catharines, has moved to Toronto.

Dr. Clarke, of Dunnville, Ontario, has moved to Toronto.

Dr. Oliver, of Merlin, Ontario, has moved to Toronto.

Prof. J. J. Mackenzie, of the University of Toronto, has gone abroad.

Dr. G. Stirling Ryerson, Toronto, has returned from Atlantic City.

Dr. J. W. Daniel, St. John, N.B., has been called to a seat in the Senate.

Hamilton had 100 deaths in February, four being from tuberculosis.

During the yast year, St. John's, Newfoundland, became an entrance port for Syrians afflicted with trachoma.

Dr. J. D. McQueen, late Superintendent of the Winnipeg General Hospital, is doing graduate work in New York.

The present Lord Mayor of London is a physician, 81 years old. He is the first physician who has ever held this honor.

Dr. Andrew Croll, Saskatoon, has obtained the qualification of F.R.C.S. (Edin.). He is at present in Germany pursuing studies in surgery and gynecology.

Dr. Geo. H. Field, Cobourg, Ont., was married to Mary, daughter of Commander and Mrs. Gearing, Annapolis, Maryland, April 18th. Heartiest congratulations.

St. Michael's Hospital, Toronto, recently formally opened a fine new wing. This cost $250,000. One of the features of the new wing is a roof-garden. The building is four stories in height.

When in Vancouver, Dr. Wilfrid T. Grenfell was dined by the University Club, Dr. R. E. McKechnie, the President, occupying the chair.

Dr. S. J. S. Pierce, Pathologist to the Winnipeg General Hospital, is at present in London, after six months' graduate work in Freiburg, Germany.

Dr. D. N. Maclennan has been appointed chief of the Eye, Ear, Nose and Throat Department of the Hospital for Sick Children, Toronto, in succession to Dr. Geoffrey Boyd, resigned.

Dr. D. A. Stewart, of the Tuberculosis Sanatarium at Annette, Manitoba, is on his way to Rome as one of the representatives of the Dominion Government to the International Tuberculosis Conference.

The American Practitioner is the title of the amalgamated *New England Medical Monthly, The American Practitioner and News* and the *Annals of Medical Practice.* It is published monthly in New York, and Dr. John W. Wainwright is the Editor.

The fifth annual meeting of the Canadian Military Medical Officers was held in Ottawa, February 28th and 29th. Amongst others who delivered addresses were the Minister of Militia, Sir James Grant, and Major J. T. Clark, Halifax.

Dr. L. L. Palmer died recently at Grimsby, Ontario. The late Dr. Palmer was for many years a prominent specialist in eye, ear, nose and throat work, but about two years ago moved to Grimsby. He had also taken a leading part in military life.

Dr. B. E. McKenzie announces that Dr. C. Stewart Wright, recent graduate of the Orthopedic Department, Carney Hospital, Clinical Assistant at Massachusetts General, and Children's Hospitals, Boston, is now associated in practice with him. Orthopedic surgery exclusively. 72 East Bloor Street, Toronto.

Dr. James D. Thorburn, Toronto, died at Guelph, Ontario, on the 26th of March, following an operation for appendicitis. The late Dr. Thorburn was a prominent specialist in nose and throat work, and has, since the death of his father, the late Dr. James Thorburn, been medical director of the Manufacturers Life Assurance Company. Dr. Thorburn was a very companionable man and was held in high esteem by his fellow practitioners in Toronto.

The Smallpox Situation in Canada.—British Columbia, Fernie, Feb. 26-Mar. 2, 2 cases; Nelson, Dec. 24-30, 1; Victoria, Feb. 4-10, 1; Manitoba, Winnipeg, Jan. 14-20, 1; Ontario, Kingston, Dec. 19-23, 1; Ottawa, Dec. 10-Mar. 2, 69; Sarnia, Oct. 17-Dec. 31, 42; Toronto, Jan. 6-Feb. 10, 2; Windsor, Feb. 4-10, 2; Quebec, Montreal, Dec. 17, Mar. 2, 21; Quebec, Dec. 10-Mar. 2, 242. There were three deaths, one in Toronto and two in Quebec City.

During 1911 there arrived at the Port of Halifax 119 trans-Atlantic passenger steamers, bringing 47,209 passengers, 42,572 of which were for Canada and the balance, 4,637, for the United States. The number of immigrants admitted to the Government detention hospital for the year ending June 30th, 1911, for mental

and physical defects, was 353, of which number 179 were destined for the United States. The number of immigrants certified for trachoma decreased considerably over the previous fiscal year.

The Æsculapian Society, Toronto, held its final meeting for the season 1911-1912 in the Albany Club, the evening of March 14th. Dr. Adam H. Wright, the President, was in the chair. President Falconer and Venerable Archdeacon Cody were the guests of the evening. The election of officers took place as follows:—President, Dr. Albert A. Macdonald; Vice-President, Dr. J. Milton Cotton; Secretary, Dr. George Elliott (re-elected); Treasurer, Dr. Edmund E. King (re-elected); Executive Committee, Drs. Walter McKeown, R. W. Bruce Smith, D. J. Gibb Wishart and Bruce L. Riordan.

Canadian Public Health Association.—The second annual meeting of the Canadian Public Health Association will be held in Toronto some time during the month of September, 1912. The officers are:—President, Dr. C. A. Hodgetts, Ottawa; Vice-Presidents, Dr. M. M. Seymour, Regina, and Dr. E. B. Fisher, Fredericton; General Secretary, Major. Lorne Drum, Ottawa; Treasurer, Dr. G. D. Porter, Toronto; Executive Council, Dr. P. H. Bryce, Ottawa; Dr. F. Montizambert, Ottawa; Dr. J. D. Page, Quebec; Dr. Lachapelle, Montreal; Dr. Chas. Hastings, Toronto; T. Aird Murray, C.E., Toronto; Dr. Chas. Hastings, Toronto; Mackay, Saskatoon; Dr. Geo. T. Clark, C.E., Saskatoon; Dr. C. I. Fagan, Victoria, B.C.; Dr. G. E. Duncan, Vernon, B.C.; Col. Carleton Jones, M.R.C.S. (Eng.), Ottawa; Dr. Smith Walker, Halifax, N.S.; Dr. E. C. Stevens, Moncton, N.B.; Dr. G. G. Melvin, St. John, N.B.; Dr. H. G. Johnston, and Dr. Jas. Warburton, P.E.I.; Dr. T. H. Whitelaw, Calgary, Alta. The local Committee of Arrangements is composed of:—Dr. Chas. Hastings, Chairman; Mr. T. Aird Murray, C.E., Secretary; Dr. Duncan Anderson, Associate Secretary; Drs. G. D. Porter, Adam H. Wright, A. J. Harrington, J. W. S. McCullough, J. W. Coulter, J. A. Amyot, and Helen MacMurchy, with power to add to their numbers.

American Medical Editors' Association. The annual meeting of the society will be held at Atlantic City, New Jersey, on June 1st and 3rd, with headquarters at the Marlborough-Blenheim Hotel. Dr. Thomas L. Stedman, editor of the Medical Record, will preside and an attractive programme is being prepared. The annual banquet will be held on the evening of June 3rd. Every editor and those associated in medical journalistic work will find this meeting worth attending.

Correspondence

ONTARIO SOCIETY FOR THE REFORMATION OF INEBRIATES.

Toronto, Ont., March 12, 1912.

The Dominion Medical Monthly, Toronto, Ont.

Dear Sirs,—The present seems an opportune time for calling attention to the liberal manner in which the Imperial Government favors the reformation of inebriates,—an example which we in Canada might follow with profit.

King George the Fifth, when Prince of Wales, upon his return from his first visit to India, is reported to have said: "Wake up, England." When it comes to the knowledge of the Vice Regent in Canada that we have no public institutions here for the reformation of the unfortunate inebriate, it is quite conceivable that he might be impelled to say, with regard to this sad defect: "Wake up, Canada."

The Ontario Government has already made an enviable reputation in the domain of Prison Reform. Its methods of caring for destitute and delinquent children is not merely up-to-date, but actually leads the world, and the extraordinary success that has attended the experiment of exchanging cell-life for farm-life for first offenders is the wonder and admiration of all penologists who have visited the Prison Farm at Guelph. Steps are also being taken for the custodial care of feeble-minded women and girls.

Nothing has as yet been done, however, in the direction of furnishing reformatory treatment for inebriates.

In the year 1898 an Act was adopted in Great Britain called "The Inebriates Act of 1898." This act provides that when a Reformatory for Inebriates is established by a County or a group of Counties and certified to by the Government Inspector, it becomes a "Certified Reformatory" under the Act and the entire expense of maintenance is assumed by the Government.

This generosity on the part of the Government has accomplished what it was designed to accomplish, namely, it has promoted the establishment of Reformatories in the United Kingdom,—in England alone there being now ten "Certified Reformatories," whereas there were two only before the Act came into operation. Not only so, but two Governmental Reformatories have also been established —one for men and one for women—for the custodial care of in-

corrigible cases removed from the Certified Reformatories where they have failed to respond to reformatory treatment, and have not been amenable to discipline.

In 1890 a Prison Reform Commission was appointed by the Ontario Government, one of the instructions being to report upon the question of drunkenness in the Province. In the report of the Commission it is recommended that two reformatories be established in Ontario,—one in the eastern part of the Province and one in the west. In 1892 a Prison Reform Conference was held in Toronto, which was attended by certified delegates from thirty different organizations, including Provincial Church Courts, the Ontario Law Society, and the Ontario Medical Association. This Conference endorsed most heartily this recommendation with regard to the establishment of Reformatories for Inebriates.

In 1894 a deputation from the Ontario Medical Association waited upon Sir Oliver Mowatt, who was then the Premier of Ontario, urging him to act upon the recommendation of the Prison Reform Commission with respect to the establishment of one or two reformatories in the Province. The Premier in reply said, in effect, that he realized fully the great need of reformatory treatment for the unfortunate drunkard, but that his Government was not prepared to undertake the entire expense involved. In case, however, the initiative should be taken by voluntary effort,—by municipalities or by the benevolent public,—the Government could be relied upon, he affirmed, to give liberal aid thereto. When the Hon. Sir G. W. Ross was Premier, he gave a large deputation (headed by Medical Associations) practically the same answer, and, at his request, a bill was drafted, printed and approved of by him and his colleagues, in which Government aid was provided for—to promote the treatment of inebriates by municipalities or by the benevolent public. The bill was never presented to the House, however, and, unfortunately, as I think, this important matter has never been brought before the Whitney Government.

For a number of years the Inspector of Prisons and Charities for Ontario has been urging the Toronto city authorities to make more adequate provision for gaol prisoners. Grand Juries have also reported, from time to time, for several years, against the overcrowding in and the faulty construction of the Toronto Gaol. After this long delay, however, action has finally been taken in the premises by the City Council, and in the right direction. A farm of over 400 acres has been purchased, about 14 miles out Yonge Street, and will be fitted up as a Reformatory Farm Colony

for Inebriates,—with special arrangements for scientific medical treatment.

This action on the part of the city—though long delayed—is most gratifying, as such an institution, properly managed, should be the means of restoring to useful citizenship a good percentage of the more hopeful class of cases, and moreover, should serve as an object-lesson for other municipalities, and for the Government as well. The question arises, however: Should the entire cost of a Reformatory for Inebriates fall upon the ratepayers of the municipality where it is established? Or should not the Government, in this matter, follow the generous example of the Mother Country?

When Hon. John Sanfield McDonald took office as the First Premier of Ontario, there were but two Poor Houses or Houses of Industry in the entire Province. He passed an Act offering a substantial bonus to every County, or United Counties, in the Province, to encourage the establishment of such institutions, and with such good effect that now, if I mistake not, a Poor House is already established, or is being established, in every County or group of Counties in Ontario. May we not hope that the Whitney Government, following such a wise precedent, will, in like manner, pass an Act in the very near future, offering, like the Home Government, liberal inducements for the establishment of reformatory institutions for inebriates in the Province?

May we not hope that the present session of the Ontario Legislature will not be allowed to pass without introduction, by the Government, of an adequate measure whereby efficient provision shall be made with a view to the reformation of indigent and police court inebriates throughout the entire province. We are also desirous that a substantial increase be made to the small grant now made to the Ontario Society for the Reformation of Inebriates. If you find that you can favor these suggestions we will be much gratified.

On behalf of this Society,

Yours truly,

A. M. Rosebrugh, M.D., Medical Officer.

Member of Prison Reform Commission appointed by the Ontario Government in 1890.

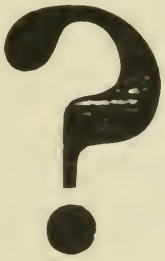
Publishers' Department

Physicians on the lookout for a field for practice can secure a short cut thereto by making their wants known to Dr. W. E. Hamill, medical broker, who conducts the Canadian Medical Exchange, at 75 Yonge St., Toronto. The doctor is in touch with practically every physician desiring to sell out, and in addition has many vacant fields without a doctor where the residents request one and where a practise of at least $3,000 annually is assured. *Bona fide* buyers can get full particulars gratis of any offer by addressing him as above, or what is still better, call personally at his office if possible. A partial list of his offers will be found each month in our advertising columns, the complexion of which necessarily changes each issue. Both vendors and vendees should get in touch with 75 Yonge St. to speedily reach the goal desired.

Never cultivate a grouch, even if in one day you have been supplanted on a typhoid case by an unethical practitioner, written a death certificate, missed an obstet., and are called to court on a day taken up fully by engagements. What's the use?—*Medical Review of Reviews.*

Mrs. MacKinnon's Massage Institution, 20 Walmer Road, Toronto. Telephone, College 7895. Mrs. Neil MacKinnon, for many years a specialist in all branches of massage, having received her training in the Old Country, has within the past few months opened an institution in this city at the above address. All forms of massage, including electrical, electric light, and needle spray baths, are administered in this institution under her personal supervision. The location of her institution is one of the best that could be desired, and there is a beautiful conservatory, with a southern exposure. There is a masseur in attendance for male patients. The rooms are large and sunny, the appointments being especially tasty and well adapted for carrying on such work. Physicians are invited to visit and inspect for themselves.

When, ten days after the crisis of pneumonia, you find the lung unresolved and unresolving, maintain a cheerful expectancy. When, ten days after this, you find the lung in the same condition, look pleased and give an optimistic prognosis. When, ten days



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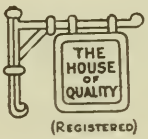
later again, the lung has not improved, be philosophic and reflect upon the limitations of the physician's art. When, at last, after forty days in the wilderness of therapeutic uncertainty, the lung clears up, be chastened in spirit and never again talk glibly anent the abortive treatment of pneumonia.—*Medical Review of Reviews.*

Ideal Conditions of Serum Manufacture.—If there is one therapeutic agent which, more than another, should be prepared with scrupulous care, that agent is diphtheria antitoxin. Its preparation should never be entrusted to the inexperienced or to those who are hampered by lack of facilities. It should have its origin in the blood of healthy horses—animals whose blood is known to be pure. The welfare of the diphtheritic patient demands a serum from which every element of conjecture is eliminated. In the opinion of many physicians these essentials are best exemplified in the Antidiphtheric Serum of Parke, Davis & Co. Certain it is that this antitoxin is manufactured under conditions that are ideal. Miles removed from the smoke and dust of Detroit, hundreds of feet above the river level, the company maintains a large stock farm, equipped with model stables and supervised by expert veterinarians. Here, in the best possible condition, are kept the horses employed in serum-production. The laboratories in which the antitoxin is prepared, tested and made ready for the market are the admiration of scientific men who visit them.

When, at the close of the year, you look over your accounts and ponder on the bad money on your books, representing conscientious effort and often self-sacrifice on your part, and human failure on the part of others, there is no regret that the service was rendered, for it was rendered to sick people. Nuf said.—*Medical Review of Reviews.*

A Pleasant, Efficient Laxative.—The desirable qualities of a first-class laxative are efficiency and freedom from unpleasant taste. The lack of either to just that extent disqualifies the product for use in the treatment of chronic constipation. That it is difficult to find a palatable and efficient laxative in the same medicament is a pretty generally accepted fact. It is possible to do so, however, and Cascara Evacuant may be cited as proof of that possibility. This preparation is pleasant in taste, and in doses of 15 to 30 minims in water it performs its duty quickly and well,



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without incidental nausea or distress. That is why children rarely object to taking it, and adults prefer it to other preparations. The product is manufactured by Parke, Davis & Co., and is procurable from any well-stocked retail pharmacy. To avoid confusion with other so-called aromatic cascaras, however, it is well to specify clearly "Cascara Evacuant, P. D. & Co."

Brand's Specialties.—Sir Victor Horsley in his address on Surgery before the British Medical Association, in Toronto, in 1906, said: "For the cardiac failure reliance should be placed on nutrient enemata, such as Brand's Essence and pancreatized milk. Brand's goods may be had from Newton A. Hill, 25 Front St. East, Toronto.

The Earl of Erroll, K.T., C.B., presiding recently at the annual meeting of the shareholders of Bovril, Limited, alluded to an article written by a high medical authority in connection with the tests made at Trinity College, Dublin, to ascertain the value of Bovril. The following is an extract from the article: "As for digestion and absorption of the food constituents of 'Bovril,' they have long been known to be of the first order. The action of 'Bovril' upon nutrition is that it acts practically as a link between the body and the food. It is on such grounds that we are entitled to say that 'Bovril' is more than a food, for it is a feeder. The upshot, one may suppose, must be that 'Bovril,' so to say, increases the temperature of the body. Everything must be a little quicker, brisker, easier running than before. Digestion is hastened, and since it is also more complete, the business of getting rid of what is not used is reduced to a minimum. That means a gain for the temperature of the body. There are constituents of 'Bovril' which greatly stimulate not so much the flow, but the quality that flows, of the gastric juice." Sir James Crichton-Browne, speaking at the same meeting, said: "It is not upon medical authority in the ordinary sense—that is to say, on the opinion of medical men who have tried it, valuable although these opinions are—that Bovril now rests its claims to consideration, but on the far firmer basis of exact scientific experiment. Doctors differ, but the scales and the test tube know nothing of diagnostic difficulties. The careful observation of Professor W. H. Thompson, of Trinity College, Dublin, assisted by Mr. Caldwell, M.A., an expert chemical physiologist, and by Mr. Wallace, B.A., have established the unique reputation of Bovril as a food

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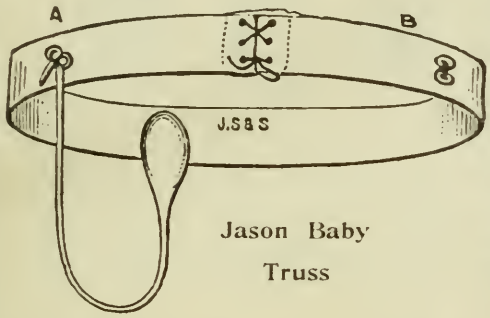

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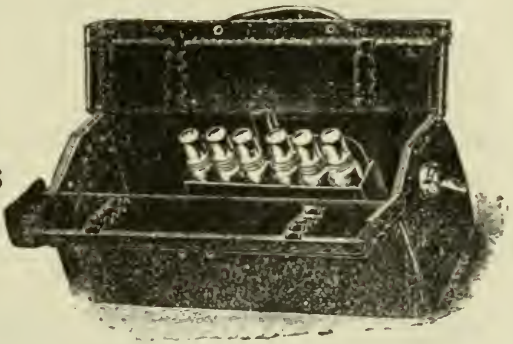

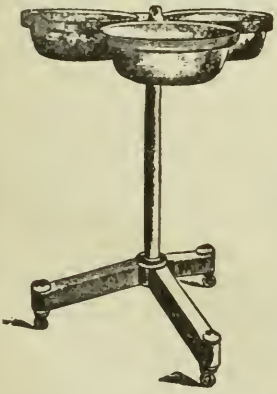

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in itself and as a powerful aider and abettor of the appropriation by the system of other kinds of food."

When a gentleman puts before you a proposition to relieve a young woman friend of good family who is greatly concerned because of the non-appearance of her catamenial flow, and who is greatly distressed because of the symptoms which tell her that the suppression is doing her much harm, be greatly interested and display a hearty sympathy. Also feel flattered, particularly if the parties concerned have avoided taking counsel with their regular medical advisers, thereby showing their superior faith in your skill in difficult cases and their belief in your greater trustworthiness as regards professional confidences.—*Medical Review of Reviews.*

Copy Letter from E. B. Forbes, Chief of Department of Nutrition, Ohio Agricultural Experiment Station, Wooster, Ohio, February, 1912. Gentlemen:—In reference to your suggestion that I write my experience in the use of whey powder with infants, I have to submit the following: Very effective use of your sweet whey powder was made in my laboratory in the feeding of a child who presents a very unusually difficult feeding problem. At the age of three weeks the child suffered a complete closure (stenosis) of the pyloric opening of the stomach. A successful gastroenterotomy was performed. Two days later the stitches pulled out and the operation had to be repeated. During this second operation an excited nurse put the child onto hot water bags that were too hot and its whole back was scalded. The shock was so great that it failed to revive and blood transfusion from the child's father was resorted to when it was in a moribund condition. This operation was successful, but the feeding problem resulting from the whole series of calamities was very difficult. The child was fed with a tube and funnel for some weeks on modified cow's milk, the fat content being gradually increased to 4 per cent. in an effort to check the steady loss in weight. At this point the child's condition being such as to cause the physicians in attendance to lose hope in its recovery it came into my hands. It presented a typical case of infantile acidosis, caused by the starvation, anesthesias, the extensive burns and inability to resorb soaps. The fat was now greatly reduced in the milk, sodium citrate added and whey used in its modification. The dying child began to gain and for the next 13 weeks averaged 8 ozs. per week. Its digestive

Dietetic Experts and

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Tests made recently in Great Britain by W. H. Thompson, M.D., Sc.D., assisted by other experts in diet, at Trinity College, Dublin, proved that when a little Bovril was added to a Standard diet it produced a marked increase in weight.

This increase represented good sound muscle and greater available energy.

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Original Articles

PERSONAL RECOLLECTIONS OF LORD LISTER.

By F. LeM. Grassett, M.B., (Edin.), F.R.C.S.

On the day that all the papers contained the news of Lord Lister's death, your President asked me to give this Academy a paper on my personal recollections of Lister and his work. This paper, then, is not an account of his life, not a recapitulation of what all medical men know, *viz.*, the great results that followed the introduction and proper use of the system he inculcated, but my personal recollections of his early work and his great struggle to convince a doubting medical world of its supreme importance.

There are others here to-night, who, about the same time were, like myself, associated with him. I am sure they feel how fortunate we were to be able to see at close range this great man; to be very intimately associated with him in early antiseptic days, when he was fighting an uphill fight against ignorance and prejudice.

When I was a student, Edinburgh University and its medical schools were very fortunate in having an unusually large number of able and distinguished men: Sir James Simpson, Sir Robert Christison, Sir Patrick Heron Watson, Matthews Duncan and others, hardly less well known. One was just passing off the stage whose name required no hall mark of honor from his sovereign to heighten his fame as a surgeon: James Syme had just given up the chair of Clinical Surgery in the Royal Infirmary. Lister, his son-in-law, and his most devoted admirer and pupil, succeeded him. As a visitor with Lister, Syme went round the wards once only when I was with him. Lister showed

* Read before Academy of Medicine, Toronto.

him a compound dislocation and fracture of the ankle joint healing as quietly and as free from all constitutional symptoms as a simple fracture and dislocation would. Syme said to the patient, "You are fortunate, my man. I lost several out of thirteen in this very ward in cases such as yours."

I had the good fortune in my first week as a *Civis Academiae Edinensis*, in 1869, to hear two introductory lectures. Prof. Playfair, afterwards Lord Playfair, had abandoned chemistry to take up educational work in the political world. His successor, Crum Brown, delivered a scholarly and able lecture. A day or two after in the same great chemistry classroom in the old University Buildings on the South Bridge, Lister delivered his. He had an unusually large audience, various reasons accounting for it. A Glasgow professor, translated by the Crown to Edinburgh, was hardly a *persona grata* there, yet his work in Glasgow had interested them, and they were curious to hear about it. The medical students of that year were registered in larger numbers than ever before. They were curious to hear this new professor who was just beginning to be talked about. I remember the lecture as if it were yesterday,—the procession into the room; the marked quiet throughout its delivery. I never listened more closely to any lecture, but then it was all new to me; all his facts seemed so clear and distinct; so logically set out. I could hardly conceive there could be any other side to the question; any possible doubt of all he said. At that time he was just over 42 years of age, at his very prime, with a commanding figure and a beautiful, thoughtful face, and a complexion which many a woman would like, and which few could surpass.

The intense hold his subject had on him, the earnestness with which he spoke heightened his color and accentuated the slight hesitancy of speech peculiar to him, adding, I thought, to the force the words carried. A brief resume of this lecture I must give you; it set forth so clearly at that early date what he claimed.

He claimed to be practising a system of antiseptic surgery, —that is, the treating of a surgical case in such a manner as shall prevent the occurrence of putrefaction in the part concerned. If this is really done what a change in behavior do many surgical injuries undergo. Injuries formerly regarded in the gravest light, become comparatively trifling, and some diseases rarely admitting of cure terminate most satisfactorily in perfect recovery.

The guiding principle, the pole star and compass combined of all its practical details, was the germ theory of putrefaction. This theory declares that putrefaction in organic substances under atmospheric influences is effected by living organisms, developed from germs floating in the atmosphere as constituents of its dust and not to the oxygen of the air, as was formerly supposed.

The proofs of the theory were, step by step, traced up, going back to Harvey's law, "*Omne Vivum Ex Vivo,*" that all animals and plants are derived from eggs and seeds, and vitality is transmitted, never created. Many scientific people have from time to time doubted the truth of this law, and the reasoning deduced from it and upheld,—spontaneous generations as opposed to homo genesis, or generation from parents. Curiously at that time in Edinburgh University, John Hughes Bennett, the able Professor of Physiology, was a strong upholder of abiogenesis, as were Huxley and Charlton Bastian. But on the other side there was a growing weight of evidence from the time of Cogniard La Tour, who, in 1836, detected in yeast the Torula Cervisia, which seemed to be the essential constituent of the ferment; next came Schwann; lastly, and greatest of all, Pasteur.

Lister's experiments were very similar to Pasteur's. One only I would like to give in his own words, because that experiment I am sure clinched in his own mind the basic principle of his work, affording as it did the strongest evidence in favor of the germ theory.

Writing in 1869 he says:

"Two years ago last month I introduced portions of the same specimen of fresh urine into four flasks—(urine being a fluid combining transparency with a high degree of putrescibility). The body of each flask was about one-third filled with the liquid. After the introduction of the fluid the necks of three of them were drawn out into tubes rather less than a line in diameter, and then bent at various acute angles. In the other the neck was drawn out to a calibre if anything rather finer, but cut short and left vertical. The liquid was then boiled for five minutes, the steam issuing freely from the open end of the narrow neck of each flask. The lamp being removed, air, of course, passed in to take the place of the condensed aqueous vapor, and during the two years that have elapsed a considerable portion of a cubic inch of fresh air has entered every night into the body of each flask to exert its influence on the liquid. In the case of the flasks with contorted necks, the air moving to and fro through the tube soon

dried the moisture which was at first deposited within it, making the neck dry as well as open from end to end, so that it could present no obstacle to any gaseous constituent of the atmosphere. Nevertheless, though thus freely exposed to the action of the gases of the air for so long a period, including two unusually hot summers, the urine still retains its original straw color and perfect transparency, presenting neither cloud, scum, or sediment. But very different is the appearance of the urine in this other flask whose neck, short and vertical, was calculated to admit particles of dust, as well as gaseous materials. (In the case of the contorted neck the angles arrested the dust). The transparent straw has given place to a muddy brown, with sediment of fungi. It is pungently ammoniacal, as can be easily observed by placing the warm hand on the flask and a nostril at the orifice. I was not content with observing the completely unchanged appearance of the bent neck flasks. Half a year after the experiment was begun I poured out half an ounce of the clear contents of one of these into a wine glass for examination. Its odor was perfectly sweet, and its reaction faintly acid. Under the microscope a careful search with an excellent glass of high power failed to detect any organisms. But exposed to dust, in two days it was loaded with minute organisms and fungi, visible to the naked eye."

Some tried these experiments of his and failed to get the same results. Lister answered these failures by saying negative results are far less strong than positives. It is also easy to understand failure in such experiments consistently with the truth of the theory; it is impossible to understand success in any single instance, consistently with the falsehood of the theory.

Then he ended the lecture. "Gentlemen, I commend these facts to your candid and impartial judgment, beseeching you to form your own opinions regarding them. The minds which you bring to bear upon this subject are very much the same as they will be throughout your lives, and you are as competent as ever you will be to draw correct inferences from established data.

"Throughout the course I shall endeavor to place before you simple facts, trusting that in estimating their significance you will be guided by what our dear master (Syme) has so consistently striven to inculcate as our leading principle—love of Truth."

Very similar experiments he later conducted with milk, only using superheated wine glasses and covering them with a glass cap and shade, purified in the same manner. The milk was not boiled, but introduced directly into the glass as from the cow, whose

teats and udder, as well as the hands of the milkman, had been previously purified by carbolic acid.

I saw the milk which had been lying in a wine glass, secured and treated as I have said, exhibited before the Royal Society of Edinburgh, by Lister. Although eighteen months had elapsed since its introduction into the wine glass, on removal of the shade and cap, it was found to be as sweet and pure as the day it came from the cow. Watched by the audience with keen interest, Lister tasted it, handed it to Tait, the learned Professor of Physics, who agreed as to its quality. How many more of the venerable fellows tasted it I have forgotten, but I know at the time it seemed to impress strongly that learned Society.

In 1870 Lister gave me a dressership. My application had been backed up by an old house surgeon of Syme's, Edward Lawrie, whom I knew at that time. Later on Lawrie joined the Indian army, and presided over the Hyderabad Commission investigating the administration of chloroform. The first cases I was allowed to dress were unimportant, chronic ulcers and the like, cases in which I could do no harm. I scrupulously washed them in 1-40 carbolic acid, dressed them with lac plaster, a stump towel on the outside, and bandaged them as carefully and evenly as if much depended upon it. The lac plaster had not long displaced the putty, which he had used in Glasgow, and very proud he was of his new dressing, frequently describing the gradual improvements in its manufacture until the perfect stage was reached.

This was replaced by the gauze. To-day we use a gauze very similar to that first made. I remember well the day Lister dressed the first case with gauze. He had finally, after being up nearly all night, perfected to his satisfaction a small piece. He came to the infirmary, and with his staff went to the laboratory and made a larger portion. He went straight back to the theatre and with it dressed a compound fracture of both bones of the forearm, then made by himself to correct a badly united fracture. This showed his confidence in dressing. It was made of cheese cloth impregnated with carbolic acid, held in resin, the resin having the property of holding carbolic acid with great tenacity, but on account of its stickiness, required to be diluted with paraffin—the most satisfactory portion being Acid 1, Resin 5, Paraffin 7. By degrees the accessories to the dressing were dispensed with as greater knowledge came, as the Mackintosh between the seventh and eighth layers, the syringe to destroy the germs, the spray—at first a hand one and then a steam spray. As one by one was discarded, much to the relief of the surgeons, Lister contended that if the

demands of the theory are met, the means cannot be too simple.

The next year I fortunately received a clinical clerkship. This brought increased responsibility,—the selecting of instruments and dressings for operations, administration of chloroform, and taking the notes of cases. Lister had three clerks and 54 beds, so it was no light task. At this time surgeons from the Continent, especially Germans and Danes, followed the daily ward visit, and Lister, painstaking to a degree, explained over and over again the theory and the minutiæ of the dressings. His own countrymen, and those on the staff of his own hospital, were infrequent visitors. In the Royal Infirmary at that time the old practice and the new by Lister were both in operation. It was easy to see both, to compare the results; but slowly, sometimes it seemed very slowly, the new gained more and more confidence in men's minds.

The student body was divided into two camps—those who followed Lister and those who believed him not. I remember a dresser of Spence's, the Professor of Surgery, about this time had effusion into the knee joint. Tapping was considered advisable. At once he became very solicitous that this should be done under rigid antiseptic precautions. It was, and with a happy result and a very rapid conversion of mind.

I have said that the surgeons of the Infirmary were not frequent visitors in Lister's wards. This is correct; but at least three of them were thorough believers in antiseptic surgery. Mr. Annandale, who succeeded Lister in the chair, was always a warm friend and upholder of Lister and his work. I acted in my first year as his dresser and once in later years as his house surgeon for a short period. Excellent surgeon that Annandale was, he never in my time seemed to grasp the necessity of complete attention to details which antiseptic surgery required. I suppose it was the old story —the difficulty of an old dog acquiring new tricks. Joseph Bell was then senior assistant surgeon and later came on as a full surgeon. He had, I think, the same difficulties as Annandale in adapting himself to the altered needs of surgical work.

John Chiene, afterwards Professor of Surgery, was always a whole-hearted and enthusiastic follower of Lister. Careful, thorough, he was a complete master of all detail and demands of antiseptic surgery. In Lister's absence during vacation, Chiene took charge of his wards. He was then the junior assistant surgeon. I had known him as the capable demonstrator of anatomy. I now found him the careful surgeon, an excellent teacher and very considerate of those under him. For many years Professor of

Surgery, he has lately given up the chair and lives, in not very robust health, at his country house near Edinburgh. I always spend part of a day with him when visiting Edinburgh. A most interesting lot of reminiscences he can tell of Goodsir and Turner, of Syme and Lister. Some of these he gave to the public in his "Looking Back," 1907-1860. The picture in the front of that booklet is an excellent one of Lister.

At the end of my clinical clerkship I asked Lister if later on he would make me his house surgeon. This he promised in the autumn of 1873, at the same time strongly urging that either before or afterwards, if possible first, I should get on in the Medical House as a house physician. Dr. George Balfour promised me his, and in 1873 I went to him and Lister afterwards.

Lister's wards were the same that Syme had had only not quite so many beds. The Trustees had appointed an extra surgeon (Mr. Annandale) and about 20 beds had been taken away for him. This I know chafed Lister, who felt the loss of them, but there was no possibility of altering it. The wards were in the old part of the Infirmary, the part that originally had been the old High School, converted into surgical wards. There was always overcrowding; the number of cases seeking admission being largely in excess of the accommodation. I have slept 70 patients in 54 beds by putting down mattresses between the beds and putting several children in one bed. This was exactly the contrary to what prevailed in the newer and better ventilated wards of the other surgeons. One might have feared at any time an outbreak, such as was not unusual at that time. Erysipelas, pyemia, hospital gangerene or any of the forms in which blood poisoning them showed itself. With the exception of a few mild cases of erysipelas and one case of septicemia following amputation of the breast, I never saw a single case of blood poisoning in any shape in Lister's wards during five years. It was a matter of common report that the surgeons who had better wards suffered not infrequently in this way, especially in the primary amputation cases. I am sure had Lister not had such confidence in the protective power of his system against such calamities he would never have permitted such overcrowding.

Distinguished foreign surgeons were now very numerous in the daily visitation. Lister, I think, treated them all with great consideration, quite irrespective of their eminence in their own country. They wished to see his work—he did his best to show it. I remember more than once at his house, in Charlotte Square, being the only English-speaking person with the exception of his

private assistant, John Bishop. One of these occasions impressed upon me how desirable it is, if possible, to know a little of the language of the country you are visiting. Prof. Saxtorph, of Copenhagen, and another Danish surgeon were among the guests one night at a large dinner party. It was necessary for the Danish surgeon to leave the table early to catch a train. Saxtorph made his excuses for him and he left the room with some embarrassment, as he spoke not a word of English.

As his house surgeon, he frequently took me to his private operations, perhaps because so few outside his actual staff were at that period capable of giving efficient aid in antiseptic details. While he was as careful and thorough as he could well be he treated always his humblest hospital patient with the same consideration, the almost feminine solicitude, that he gave to the proudest dames that sought his care.

Bear with one illustration. In the treatment of large chronic abscesses the then usual practice of surgery was to draw off the matter by means of a cannula and trocar, or some similar manner. No surgeon dared to open them in adults at any rate. This manner of opening was frequently successful at the time, the patient being relieved from the accumulated fluid; but pus was almost certain to reaccumulate and again tapping must be repeated. Sooner or later, inflammation and constitutional symptoms compelled free incision, when usually fetid pus escaped. Antiseptic surgery taught the wisdom and safety of free incision and provided careful dressing with drainage was continued in time, even the tubercular bone healed and a cure resulted. But sometimes the time required was long. Yes, even one or two years. I know in my time in Edinburgh the managers of the Infirmary grumbled at the length of time that some of Lister's cases of chronic abscess of the hip and spine held possession of the beds. On one occasion at least, Lister appeared before the managers and by his explanation prevented them taking any action.

When Lister left Edinburgh, in 1877, there were eight cases in his wards of psoas and hip abscess—seven men and boys and one woman. Lister thought they would remain in the hospital under Annandale until they got well. Dr. John Stuart tells me that shortly after Lister went to London it was decided to turn these patients out. Caird wrote to Stuart and asked if the girl, a lady's maid from the South of England, would be taken in at Kings. "I shall never forget," he says, "the pained look of surprise in Lister's face when he heard his patients were to be turned out." I wired Caird "Yes," and that night she left for London

under the care of a nurse, transported in one of those long baskets which in Edinburgh were used to carry patients to the operating theatre, manned by the dressers of the surgeons. She ultimately got quite well and the "Chief," writing a year or two later, said that he had seen her walking and looking bright and well. Lister had the men and boys taken from the Infirmary to a nursing home where he used to operate in Edinburgh. He put them under the care of his old assistant, John Bishop, and paid all the expenses connected therewith, including attendance and dressing. In the end all of them got perfectly well.

Sunday afternoon in the wards was a busy time. Lister, though a member of the Society of Friends, went, if I am not mistaken, to Trinity Church—a Scotch Episcopal Church of the old-fashioned sort, just over the Dean Bridge. At about two o'clock he would come to the Infirmary. Any cases that had not been overtaken in the pressure of the week-day work were investigated and disposed of; minor operations done. Very pleasant were those Sunday afternoons. No visitors, no strangers; but often discussion of points in the cases given with much more freedom than was usually feasible. The bells were often ringing six when I walked out with him to Infirmary Street. He never, I think, took out his horses on Sunday. I hardly think any of the clerks or dressers found those Sunday afternoons long or wearisome in the very least.

I cannot remember his ever discussing any aspect of religious belief with me; but I have reason to know that neither his scientific researches nor his ceaseless work nor the high honors heaped upon him prevented his having a child-like Christian faith. He ever held fast the blessed hope of everlasting life.

About this time he was summoned to Balmoral to attend Queen Victoria. She had an abscess in the axilla which required to be opened. He did it under the spray with complete antiseptic precaution. He told us how he had no drainage tube but cut off a portion of the tube of the spray producer to make one; also, that the Queen said she liked the smell of the carbolic spray. Carbolic acid, as his main antiseptic, had been chosen after considerable investigation. Many objections had from time to time been raised against it, one being its odor. This royal opinion on that head gave Lister considerable satisfaction. His selection by Her Majesty showed the estimation in which his work was now being held. There were others on the Royal Scottish staff that might, by age and experience, have been selected.

By degrees his old pupils, especially his old house surgeons, were helping to spread his views. Cleaver had gone to Liverpool;

Fleming to Glasgow; Knowsley Thornton to be with Sir Spencer Wells at the Samaritan for Women, in London; Beatson, afterwards Sir George Beatson, to Glasgow; Malloch, who had been his house surgeon in Glasgow, had already settled in Hamilton, Canada. Lister wished me to go to Norwich to take charge of the hospital there and help Mr. Cadge, the well-known surgeon in the East of England, to become familiar with the practice of antiseptic surgery. I had decided to return to Toronto and so, with much regret, declined his offer. Baldwin followed me later on to Toronto.

In 1877, Lister left Edinburgh for London. Kings College offered him the vacant chair of Sir William Ferguson. I think he felt, if he accepted it, he would have greater facility for reaching the profession in England. The London men had been slow to adopt it; very sceptical about it. Here was a great chance to let the profession see his grand results. Two men went with him from Edinburgh. Watson Cheyne and John Stuart, now of Halifax, both of them loyal, devoted pupils who stand out perhaps foremost, among those whom Lister trained.

In 1879, two years after he went to London, Mr. Savory, afterwards Sir Wm. Savory, surgeon to and lecturer on surgery at St. Bartholomew's, delivered the address on surgery before the British Medical Association. He chose as his subject the prevention of blood poisoning in the practice of surgery; he called it the chief evil that waits upon the surgeon's work. He analysed statistics of operation cases in his own hospital, showing excellent results as to freedom from death from pyemia, erysipelas and the like. After covering the subject exhaustively, he contended strongly for simple means of dressing and yet he rejoiced in laudible pus.

Of antiseptic dressings, however, he says: "I say then I cannot admit the claim of Lister's method, because though undoubtedly good results are to be obtained by this practice—better ones no doubt than most of those reached in former years—or are still in many places, yet it has not shown results superior or equal to those which have been otherwise achieved. Moreover, it has grave drawbacks from which simple plans are free; that if it failed it is worse than useless by increasing the risk. And, therefore, it has not established any title to supercede all other methods in the practice of surgery." Such was the opinion of some at that date.

In 1880, Professor Spence, of Edinburgh, published his surgical statistics in reply to those of Lister given at a recent debate on antiseptic surgery. He prefaces he is not actuated by any such motive as sometimes characterize criticisms of Lister, as due

to envy, malice and all uncharitableness. Then he produces a paper which Lister, the mildest of men, in his answer, says consists of two elements: "One tending to disparage my character as a surgeon, the other calculated to diminish the effect of the statistics which I have lately adduced in favor of antiseptic surgery. The former of these elements I shall beg leave to dismiss without further notice than to remark that as Mr. Spence never did me the honor to witness the practice which he criticizes, so that his knowledge of it must have been derived entirely from hearsay, the exercise of a little charity towards a late colleague might have induced him in every one of the points to which he refers to accord a more generous and at the same time a more just interpretation."

This called forth from Spence a powerful reply and Mr. Watson Cheyne furnished full statistics of Lister's results. Mr. Spence's reply to this was so severe that the editor of the *British Medical Journal* suppressed parts of it and said his remarks as to Cheyne were scarcely worthy of so eminent a surgeon.

If in the discussion of this momentous question some sharp blows were given and taken until conviction gradually became universal, yet from time to time Lister received marks of honor and appreciation that were unusual.

On leaving Edinburgh, he vacated the office of Surgeon to the Queen in Scotland, yet in 1878 he is gazetted as a surgeon extraordinary to Her Majesty in the place of Mr. Hilton. In June, 1879, Dublin University gave him the M.D. *honoris causae,* and in conferring it the Dean of Faculty said: "They might claim for him merits equal, if not superior, to the merits of Simpson in reference to anesthesia."

It would be wearisome to give any adequate idea of the degrees and honors conferred on him by countless learned societies the world over. One only would I like to refer to, coming as it did at the time of these severe criticisms already mentioned.

In September, 1879, the *British Medical Journal* says: "The enthusiastic ovation with which Prof. Lister has been honored this week at the International Congress of Amsterdam by the body of surgeons and physicians of all nations who were assembled there will cause great joy in Kings College and Hospital, which have the advantage of possessing the surgeon whom Europe delights to honor. The honors which have been heaped upon Lister by every country in the world are not perhaps without precedent in the history of medicine; but we know no precedent for the enthusiasm which his presence creates in every assembly of medical men in Europe and the almost regal reception everywhere accorded

to him. It is, as Professor Donders expressed it, not only a testimony of admiration to the learned surgeon who has known how to draw from the teachings of absolute science the most precious, precise and accurate safeguards for practical surgery, and who has enlarged the bounds of its achievements while he has disarmed it of its worst terrors and anxieties; but it is also an expression of gratitude for the multitude of lives already saved throughout Europe by the application of his methods and the endless vista of benefits to humanity which opens up before the universal adoption of antiseptic principles. Whatever may be doubted no one will deny that Professor Lister has created a revolution in surgery throughout Europe by which every day lives are saved, and it cannot be said that the honors thus spontaneously showered upon him by the most critical of judges—his foreign contemporaries—are other than well-earned.

"Few men, if any, however have lived to see themselves so quickly hailed by the masters of thir own art in all countries as among the greatest benefactors of their kind. And English surgery may well feel proud of its illustrious professor who has once more made the name of English science and humanitarian progress resound with applause in every country."

After I came to Toronto, in 1875, it was not till 1886 I saw him again. I visited England in that year and soon went to Kings College Hospital. I slipped into the theatre unobserved, I thought, while he was operating. I found time had changed him a bit. His brown hair was heavily tinged with gray, spectacles were necessary for operating; but in all other respects he was unchanged. I fancied perhaps he would not remember me, but after the operation was over he washed his hands in his usual deliberate manner and looking round the seats, said: "Where is that fellow?" smiling. He warmly shook me by the hand and made me promise to dine with him that night. After dinner was over, Rickman Godlee, his nephew, and others left the table, but Lister kept me telling me all changes and improvements that he had made, the difficulties he had overcome, since I had been with him. So keen was he in telling me all this and so interested was I in listening, that the time passed quickly away and it was eleven o'clock when we went upstairs, to find only his wife and mine in the drawing-room. I think the absorbing interest of his work made him oblivious to time and place.

Many of us remember him in Toronto at the meeting of the British Association. I think he had, in common with many Englishmen at that time (though times have changed since), the idea

that Canada was an ordinary country and Toronto a commonplace city. I called at the Queen's Hotel the first morning of the meeting early and brought him up in my carriage with Sir Wm. Turner, the President of my University, who was staying with me. It was a lovely August morning as we drove up to the Queen's Park, and as the University compound and the park opened before them Sir William said to Lister: "This is a very nice place, Lister." "It is, indeed, Turner," said Lister. They were charmed with the University and its surroundings. Further knowledge of Toronto only deepened the pleasing impression they received at first. How much the profession here made of him and the pleasure it gave him I can testify; but many remember it well no doubt. During that visit I saw much of him as I had known him well in the long ago. He seemed to enjoy much speaking of the past: of his wife, to whom he was so devotedly attached, and of her sad and sudden death when travelling in Italy. I saw him only twice afterwards. I find his last letter to me was dated June, 1907. In it he says that he is in infirm health, but it would give him much pleasure to see me at Park Crescent. Unfortunately, I did not go to London during that summer. Two years afterwards, when in England, I found he had gone to Walmer and his return to London was a matter of great uncertainty. Though his niece said she thought he would see me, I hesitated to intrude upon him.

Of the actual results of his work, of the benefits that it has conferred on humanity, it is impossible to make any estimate. I have seen it in print somewhere that in 1900 it was asserted, with much appearance of probability, that it had already saved more human lives than all the wars of the expiring century had sacrificed. Well, indeed, did Mr. Bayard, the American Ambassador, sum up the matter at a banquet of the Royal Society in proposing Lord Lister's health, when he said: "My Lord, it is not a profession, it is not a nation, it is humanity itself which with uncovered head salutes you."

In 1883 the Crown conferred a baronetcy upon him, and Queen Victoria later raised him to the peerage; the only one, I believe, ever conferred on a surgeon.

Gratified, no doubt, as he was by these honors, yet I feel sure that Joseph Lister valued the great, the inestimably great, work he did for humanity far above any honor that could possibly be conferred upon him.

This Society, I think, does well to honor his memory to-night. His life has been written with more or less completeness and ability, and no doubt will be done again. I have tried to give, not

an appreciation of him, not an account of his life, but an outline of my personal knowledge of him. How imperfectly I have succeeded in showing up some of the characteristics that mark so strongly my old teacher—one of the greatest of men—nobody knows better than myself, but in loyalty to, in affection, yes, in love for him, I yield to none.

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*REMARKS ON ECZEMA WITH SPECIAL REFERENCE TO ITS ETIOLOGY.

By Graham Chambers, B.A., M.B.

There are few diseases which are more important to medical men than eczema, whether we take into consideration the frequency of its occurrence, the easiness, as a rule, of its diagnosis or the effectiveness of careful treatment. Yet after all this has been said we must acknowledge that the etiology is little understood, and as is necessary under such conditions the treatment is more or less empirical. This defect in our knowledge of eczema is not due to lack of investigation for there are few diseases which have been more closely studied. The investigations, however, have not been without value. Observations have been recorded which will in time no doubt prove of value in elucidating the problem of the disease.

In studying the disease one of the obstacles met with is the difficulty of defining what is meant by eczema. It cannot be defined by its pathological characters because one can produce by external irritants such as dyes, flour, sugar, and bichromate of potassium, dermatites indistinguishable as to their gross and microscopical appearances, from eczema. This difficulty has been recognized ever since physicians began to give special attention to the study of cutaneous affections. Bateman and Willan, who classified skin diseases according to their lesional characters (papules, vesicles, scales, etc.), restricted the name eczema to certain vesicular eruptions and included under this heading not only rashes of unknown origin, but also those caused by external irritants. For example, in their Atlas of Cutaneous Diseases published in 1849 there is a plate designated eczema rubrium

* Read before the Hamilton Medical Association, February, 1912.

mercuriale, a moist dermatitis caused by the application of a mercurial preparation to the skin. Somewhat later this idea was expanded by Hebra, the elder, who stated that eczema was nothing more than a superficial inflammation of the skin, dependent on some external irritation. Hebra admitted that constitutional conditions might predispose to eczema, but maintained that local irritation was essential in the genesis of the disease. He even went so far as to include itch with the eczema inasmuch as it is caused by an external irritant.

Nowadays our views with regard to the part played by external irritants in the causation of eczema are quite different from those of Hebra. We no longer apply the name eczema to any dermatitis produced by chemical or mechanical irritants, but designate it, artificial dermatitis. This, however, is open to criticism, because in many cases of artificial dermatitis there is a predisposition, due probably to constitutional disturbance which renders the skin hypersensitive to irritation. For instance, in chocolate dippers only about one in ten suffer from an eczematoid eruption of the hand, which shows that the predisposition to the dermatitis is of first-rate importance. On the other hand, an artificial dermatitis is generally localized to the seat of irritation, which shows that the local irritant is an important etiological agent. In eczema the lesions appear in parts not subjected to local irritation, which character is important in differential diagnosis between the two affections.

If we deny that an eczematoid dermatitis produced by an external physical agent is an eczema then naturally one should also exclude similar eruptions caused by local irritation of animate agents. This, I may say, is the custom followed. For instance, some of the eruptions which are now described under the heading of seborrheic dermatitis were formerly classed with the eczemas. As soon, however, as the etiology, pathology and symptomatology of seborrheic dermatitis was understood the eruptions which were formerly classed with the eczemas were given their correct nosological position; and there is no doubt that as our knowledge of dermatology increases other eruptions which are now designated eczema will be separated as distinct entities. Eczema at the present should be looked upon as a composite affection. It would be more correct to speak of the eczema group or eczemas than eczema. With this conception of the term one might place in the eczema group any superficial inflammation of the skin, originating without visible external irritation and exhibiting in some stage of its evolution serious exudation.

THE ETIOLOGY OF ECZEMA.

There are two theories regarding the origin of eczema. According to one, eczema is microbic in origin; and to the other, amicrobic.

THE MICROBIC THEORY OF THE ORIGIN OF ECZEMA.

According to this theory, eczema is an infectious inflammation of the skin.

Among those who have strongly supported the microbic theory are Bockhart and Unna. Bockhart, experimenting with virulent staphylococci aureus and albus, found that an inoculation of the skin with a filtrate of a culture produced a papulo-vesicular eruption having the gross and microscopical appearance of an eczema. Bockhart's observation was confirmed by Bender and Gerlach. These investigators looked upon the eruption as due to the irritation of the staphylotoxin acting as a serotactic agent, i.e., an agent which repels the leucocytes, but attracts the serum. Bockhart goes as far as defining an eczema as "an infection inflammation of the epidermis caused by staphylococci." He thinks that staphylococci, normally present but inactive in the follicles, become from some external or internal disturbance active and excrete the staphylotoxin which passes through the wall of follicle into the intercellular spaces in the epidermis and there sets up a serotaxis with resulting vesication. At first the vesicle is sterile, but soon the stapyylococci make their way into it and there exert a positive chemotaxic action resulting in a greater or less degree of pustulation.

Unna holds a different view from that of Bockhart. In 1899 he reported that he found in large numbers in the skin in eczema a coccus which he named the "morococcus" from the fact that it tended to be arranged in groups like mulberries. His observation received little support. Moreover, it was soon shown that the morococcus, was probably the same as the staphylococcus epidermidis albus; and lately Unna has given up the belief that the morococcus is the cause of eczema. Unna, however, still believes in the microbic theory. He has isolated twenty-three cocci in a case of eczema. Of these twelve are harmless and eleven pathogenic. Two of the pathogenic varieties, which he has named "Neufang" and "Traubelpaas" after the names of patients from whom they were taken, are capable of producing an eczematoid eruption when inoculated on the skin.

Sabouraud, who may be taken as representing the French school, although believing in the amicrobic origin of eczema, holds the opinion that several dermatites which are now generally described under the heading of eczema are caused by infectious agents. He has given the name streptococcic epidermatitis to certain of these eruptions. These may be secondary boils, abscesses or other pus infection. Frequently they begin as intertrigoes, which may become moist, fissured, and spread either by continuity or by the formation of new foci on various parts of the skin. The eruption which is so frequently seen behind the ears of children is frequently a form of the disease. In some cases, especially in the anemic and debilitated, the eruption spreads widely and may become universal. The character of the eruption is variable. It may be characterized by scaly patches, moist surfaces, or vesicles. As a rule itching is not a marked symptom which character aids one in distinguishing it from eczema. The distribution is somewhat similar to that of seborrheic eczema, but the latter disease is generally secondary to a similar affection of the scalp.

Perleche is another affection which is classed with the microbic dermatitis. It is characterized by whitish patches, usually fissured, situated at the commissures of the lips. In some cases the dermatitis extends on the skin of the cheek, but this is unusual. The whitish soddened patch resembles a syphilitic mucous patch.

The problem which one has to solve in these cases is the mode of extinction of the dermatitis. How, for instance, a discharging abscess produces a dermatitis in the adjacent skin as well as in distant parts. The observation of Bockhart, referred to above, that a filtered bacterial culture, rubbed on the skin produces an eczematoid dermatitis, affords an explanation of the extension by continuity, but does not fully explain the extension to foci in distant parts, because it is improbable that sufficient toxin can be carried to parts of the skin at a distance from the primary focus to produce the irritation. Here one must seek another explanation; and I think the modern theory of anaphylaxis is one at our command. I shall refer to this again in the consideration of anaphylaxis and sensitization of the skin.

THE AMICROBIC THEORY OF THE ORIGIN OF ECZEMA.

This view is generally accepted by the French and, I think, the majority of British and American dermatologists. It is not denied by these that bacteria take part in the evolution of the

eruption, but it is asserted that the primary lesions of eczema are at first sterile and only become secondarily infected. I shall briefly call attention to some data which appear to support this theory. This for convenience of description will be considered under the following headings:

(a) The Arithmetic Diathesis as a Predisposing Cause of Eczema.

(b) Disturbances of Metabolism as Causes of Eczema.

(c) The Influence of Anaphylaxis in the Etiology of Eczema.

(a) THE ARITHMETIC DIATHESIS AS A PREDISPOSING CAUSE OF ECZEMA.

The arithmetic diathesis or arthritism is a particular form of nutrition which appears to predispose a person in which it exists to certain diseases especially eczema, asthma, bronchitis, migraine, gout, renal calculus and diabetes. Bouchard defines it as a sluggishness of nutrition; Landouzy, bradytrophy. The condition appears to develop under the new conditions imposed by civilization which tend to develop the cerebral faculties at the expense of the bodily.

The arthritic person may be lean or fat. The lean type, according to my experience, is especially liable to eczema, asthma and bronchitis; the fat type, to eczema, bronchitis, gout and diabetes. It is unusual to find all these ailments in the same individual, but several may be present in the history of a family. One member of a family may suffer from asthma; a second from eczema; a third from migraine; a fourth from gout or mild diabetes.

The arthritic person is especially predisposed to eczema; and it will be found that if there is marked arthritic diathesis in the family history, the eczema is difficult to cure. It would appear, therefore, that the metabolic or nervous disturbance which is the basic cause of the diseases to which the arthritic person is predisposed is a cause of eczema. The question for us to determine is, what is this disturbance? The problem is a very difficult one and it is unlikely that it will be solved in the near future. The diseases, (eczema, asthma, migraine, gout, diabetes, etc.), which

are in some way etiologically linked together, are so diverse clinically that one cannot suggest any mechanism by which one agent can be an etiological factor in all.

For instance, eczema and asthma are two diseases, which occur so frequently in the same patient, either co-incidentally or at different times that there can be no doubt that they are etiologically related.

Now in asthma we have spasm of the bronchial tubes brought about reflexly by irritation of other parts, especially the mucous membrane of the nose; and in eczema we have a catarrhal inflammation of the skin. I see no way of linking these together except by considering them as both being primarily due to nutritional or nervous disturbance which in one case results in a hypersensitive condition of the nervous system to reflex action and in the other to a hypersensitive condition of the skin which with the least possible irritation results in inflammation.

(b) DISTURBANCES OF METABOLISM AS A CAUSE OF ECZEMA.

The etiological relationship of disturbances of metabolism to eczema has not been definitely determined. Some dermatologists who look upon eczema as a local disease believe that metabolic disturbances play little or no part in the etiology of the affection. There are others who hold the opposite view, asserting that disturbances of metabolism are very important. I may state that I am decidedly in favor of the latter. In the history of patients with eczema, one frequently gets a history of excessive eating, but a much more important sign showing the relationship is the great value of partial or absolute starvation in the treatment, especially of acute cases. I know of no measure more valuable than this in the treatment of the disease.

With regard to the question whether the harm results from the excessive eating of proteins, fats or carbohydrates, I have not formed any definite opinion. In practice I usually blame the proteins, order a diet of low protein content, and free from meat and fish. I also order that the patient drink no tea or coffee, because these beverages contain considerable purin bodies which it is reasonable to suppose, might prove harmful especially in an arthritic.

(c) THE INFLUENCE OF ANAPHYLAXIS IN THE ETIOLOGY OF ECZEMA.

The term anaphylaxis is used to designate a hypersensitive condition of the body to foreign substances. It is merely a theory

or hypothesis formulated to explain certain facts which have been observed in experimenting on lower animals and also in the treatment of disease. Some of the most important of these observations are:

I. Magendie, in 1837, observed that a rabbit which had received an injection of albumin without ill effects might die from the second given some days later.

II. Von Behring, in experimenting on guinea pigs with diphtheria antitoxin, found that the second dose given at an interval after the first might prove fatal.

III. Richet, in 1902, experimenting with poisons of certain actinians in dogs, found that the second dose given after an interval of some days invariably produced a greater effect than the first.

IV. Arthurs, in 1902, found that a single dose of horse serum given hypodermically produced no effect, but that repeated doses not necessarily in the same place produced edema, sloughing and ulceration. He also found that an intravenous injection administered some time after a subcutaneous injection caused death.

V. Theobald Smith found that a single dose of horse serum injected into the peritoneal cavity of a guinea pig produced no action, but that repeated doses frequently resulted fatally. The fatal result only occurred in animals which had been given a dose several weeks previously.

The theory of anaphylaxis was introduced to explain these facts. It is thought that the introduction of a substance usually a protein, and foreign to the tissues, subcutaneously intravenously or possibly by the mouth may make the animal hypersensitive to a second dose of the same substance given some time later. The first is called the sensitizing and the second the reacting dose.

In experimenting on animals there must be at least one week after the first dose before the animal becomes sensitized. This interval is called the period of incubation of the anaphylactic state.

In animals the manifestations of anaphylaxis come on almost immediately after the giving of the reacting dose. In some cases they appear in a few seconds. The length of time depends a good deal upon the rapidity of absorption.

The symptoms of anaphylaxis are variable. In some cases there is bronchial spasm; in others cardio-vascular disturbance; in others again edema and erythema of the skin. It would be impossible to mention all the symptoms which may occur.

The period of duration of the anaphylactic state may vary from a few weeks to several years. In rabbits it has been shown that the hypersensitive state of the mother rabbit can be transmitted to its young.

The theory of anaphylaxis which was first introduced to explain the phenomena observed after the injection of albumins and serums was later expanded so as to include many other phenomena. Rosenau and Anderson showed that the anaphylactic state could be produced by the injection of dead bacteria. This, at once, suggested that the cutaneous reaction observed by von Pirquet in patients with tuberculosis was probably a manifestation of anaphylaxis. The fact that von Pirquet's reaction once established generally remains through life even in the absence of symptoms of tuberculosis in the patient may be explained in this way.

The theory of anaphylaxis also affords an explanation of the appearance of eczematoid eruptions after bacterial infection of the skin. It may be supposed that the body becomes sensitized by solution of bacteria in an abscess or other primary affection, and that a later inoculation produces the eruption.

An observation which has a very important bearing on practical medicine was made by Bruck, who showed that rabbits and guinea pigs could be sensitized by feeding crab meat, hog and sheep serum per os.

If an animal can be sensitized by feeding per os, then it is quite reasonable to believe that the idiosyncrasies to certain food stuffs such as mussels, sausages, strawberries, etc., are due to an anaphylactic state.

Again one may, with reason, suggest that eczema is a manifestation of anaphylactic reaction. It may be supposed that a hypersensitive state is inherited or acquired. The arthritic diathesis, which we know is so frequently present in patients with eczema, may be due to a hypersensitive state of the tissues. The excessive eating of meats, which I believe is a cause of eczema, may result in the same condition.

Medicine

GRAHAM CHAMBERS, R. J. DWYER, GOLDWIN HOWLAND, GEO. W. ROSS, WM. D. YOUNG.

The Gastric Contents in Gastroptosis. By THOMAS R. BROWN, M.D., BALTIMORE. *New York Med. Jour., Sept.* 16.

The digestive signs of gastroptosis are stated by authorities to be either superacidity, diminished acidity or motor weakness, that is, they vary in different cases. Brown quotes his experience of new cases, which shows achylic in 14, diminished acidity in 14, and increased in only four.

The extent of the diminution in acidity depends on the degree of prolapse, while cure of the functional disorder is produced by the improvement of the prolapse.

The Pituitary Body. By CHARLES W. HITCHCOCK, M.D., DETROIT, MICH.

The pituitary gland is anatomically composed of an anterior lobe of nervous origin and a posterior lobe of nervous origin.

Physiologically it appears to have a marked influence over the other ductless glands, and its complete removal leads to death of the individual.

Hyperactivity of the non-nervous portion is associated with gigantism and acromegalia, while its atrophy or partial ablation leads to a disturbance of adiposity, infantilism and a loss of adult sexual characteristics.

The post part of the gland causes rise in blood pressure, slowing of pulse and increased flow of urine, also pupillary dilatation, inhibition of pancreatic secretion. Resections into the sexual glands are shown by impotence and amenorrhoea, with the pancreas by glycosuria, in lesions of the pituitary.

Physiologic Therapeutics

J. Harvey Todd.

The X-Ray as a Curative Agent in Malignant Tumors. Aspinwall Judd, M.D., New York. *Medical Record.*

Two rays are present in a rontgen tube, the X-ray and the cathode ray.

The physiological action of the cathode stream in a low tube is of sunlight intensified, producing hyperemia, and in its fullest extent, escharosis. The penetration is low (6 m.m.) and only valuable in skin lesions.

The X-ray in a high tube penetrates all substances with a velocity proportional to their density, travels in straight lines, has a selective action on diseased tissues, and at first is stimulating. When this effect is intensified it produces overstimulation with destruction of the cell through fatty degeneration. Upon connective tissue the stimulation produces an exaggerated adult type of connective tissue, i.e., fibrous tissue. Upon connective tissue growths, i.e., sarcoma, its effect is to transform the sarcoma to a fibromata. Upon glandular tissue its final action is to produce a death of the cell elements.

About 90% of epitheliomas without metastases or glandular involvement can be cured by this means. Malignant angiomata react most favorably to the X-ray.

In deep seated carcinoma raying is justifiable only when the growth is inoperable and is useful only to alienate pain. The post-operative raying of malignant conditions, I thoroughly approve, and this as soon as healing is complete.

Sarcoma reacts readily to X-ray treatment, but is very prone to recurrence, such recurrences, however, react as well as the original growth.

In treating a deep-seated tumor of any type we must select a tube with the greatest penetration, and the patient should be protected carefully.

In lymphosarcoma we have a type of malignant growth in which the X-ray is peculiarly efficacious. Treatment should be early and energetic.

J. H. T.

Obstetrics

Arthur C. Hendrick.

The Midwife Problem.

The results of a letter of inquiry containing fifty questions addressed to teachers of obstetrics in various medical schools giving a four-year course are reported and discussed by J. Whitridge Williams, Baltimore (*Journal A. M. A.*, January 6). He finds the condition of affairs unsatisfactory. Forty-three replies in all were received to the 120 letters sent out, the answers representing one-half of the acceptable and one-fifth of the non-acceptable medical schools. From these answers received, Williams concludes that, generally speaking, the medical schools are inadequately equipped for teaching obstetrics, one only have an ideal clinic, and that one not Johns Hopkins. Many of the professors are poorly prepared for their duties and do not properly appreciate their obligations as teachers. Some admit they are not competent to perform the major obstetric operations, and consequently can be expected to do little more than train men-midwives. Many of them admit their students are not prepared to practise obstetrics on their graduation, nor do they learn to do so later. One-half the answers say that ordinary practitioners lose proportionally as many women from puerperal infection as do midwives, and over three-quarters say that more deaths occur from faulty operations than from infection in the hands of midwives. Reform is needed, and the following measures are, in his opinion, most important: A. Reduction in the number of medical schools, with adequate facilities for those surviving and higher preliminary education on the part of students. B. Insistence in university medical schools that the head of the department be a real professor whose prime object is the care of hospital patients, the proper training of assistants and students and advancement of knowledge rather than a prosperous medical practice. C. Recognition by medical faculties and hospitals that obstetrics is one of the fundamental branches of medicine, and that the obstetrician should be a scientific man with a broad grasp of his subject. D. Education of the general practitioner to realize that he is competent to conduct only normal cases of labor and that major obstetrics is major surgery, to be undertaken only by specially trained men in the control of abundant hospital facilities. E. The requirement by State exam-

ining boards that every applicant for license to practice shall show that he has had personal experience with at least ten obstetric cases under appropriate clinical conditions. F. Education of the laity that poorly trained doctors are dangerous and that most of the ills of women result from poor obstetrics, and that poor women in fairly well-conducted free hospitals usually receive better care than well-to-do women in their own homes; that the remedy lies in their hands, and that competent obstetricians will be forthcoming as soon as they are demanded. G. Extension of obstetric charities—free hospitals and out-patient services for the poor and proper semi-charity hospital accommodations for those in moderate circumstances. He would also advise a greater development of visiting obstetric nurses and helpers trained to work under them and the gradual abolition of midwives in large cities and their replacement by obstetric charities. If midwives are to be educated it should be done properly and not in a makeshift way, and even then disappointment will probably follow.

Tuberculous Lungs.

Freidrich (*Mün. med. Wochen.*) treats tuberculous lungs by total mobilization of the chest wall,—thoracoplastic pleuro-pneumolysis. Fourteen of his patients are in fairly good health up to the present time. Fine results have been obtained by him in thus immobilizing the lung, inducing a pneumothorax. In 1888 Quincke was the pioneer in this line, and the Warburg clinic has a record of twenty-eight operations, where resection of more or less ribs has been done over the cavity. Patients under 15 and over 40 are not accepted. The mortality has been 26 per cent.

Bronchial Asthma.

Lemann (*Am. Jour. Med. Sciences*) states iodide is the sheet anchor in the treatment of this distressing condition. By it the paroxysms and severity are diminished. Large doses are not needed, so the stomach is saved. From ten to fifteen grains of potassium iodide, three times a day, for several months, and then given for periods of ten days with ten days' interval of rest. Sometimes he directs the iodide to be taken for the first ten days of each month.

Reviews

Practical Electro-Therapeutics and X-Ray Therapy. By J. M. Martin, M.D., St. Louis, C. V. Mosby Co.

A well written book for the general practitioner and student, giving in a concise manner an excellent introduction to the many uses of electricity in therapeutics.

The chapters on high-frequency currents are particularly interesting and instructive. Unfortunately, the author has given practically no space to an important part of electro-therapeutics, *i.e.*, Phototherapy.

J. H. T.

Direct Laryngoscopy, Bronchoscopy and Esophagoscopy. By Dr. W. Brunings, translated and edited by W. G. Howarth, M.A., M.B., Camb. F.R.C.S., Eng. London: Bailliere, Tindall and Cox, 1912. Medium 8vo., xiv.+370 pages, 114 illustrations, including 26 plates, price, 15s. net.

This book—a standard text-book on the continent—should become the same here, since it has been well translated into English. The author, who by his mechanical ingenuity in the devising of instruments has done so much to simplify and render perfect the various operative procedures, treats of his subject both from the technical and the practical standpoints. "For the skilled observer there are many wearisome details that might well have been omitted, but daily experience in my endoscopic classes has convinced me that the written description must include the most elementary details, if it is in any way to replace personal instruction. Therefore minute details are given as to anesthesia, position, to size of tubes, and to the manner of their introduction. Naturally the author favors and describes the use of his own set of instruments, the most satisfactory, in the reviewer's opinion. The mirror of the electroscope has been modified, being slotted instead of solid, thereby simplifying the technique. Chapter IV, on the trachea and bronchial tree, contains many interesting anatomical and physiological data. Chapter VII. is on esophagoscopy in which the author says "Its eminent services are so generally recognized that the unjustified use of esophageal probangs and blind

extraction instruments, as also unjustified delays in the case of dangerous disease of the esophagus, must in future be decidedly condemned."

The book can be recommended, and should be in the possession of all interested in and practising this branch of work.

G. B.

Dental Examination Papers. For the Diplomas of the Royal College of Surgeons, Edinburgh, and the Royal Faculty of Physicians and Surgeons, Glasgow. Price, 1 shilling. Edinburgh: E. and S. Livingstone.

This is a paper bound book of 60 pages of examination questions, well arranged, covering the entire curriculum. They extend over several years.

Fellowship Examination Papers. For the Diplomas of the Royal College of Surgeons, Edinburgh. Price, 1 shilling. Edinburgh: E. and S. Livingstone.

This is a paper bound book of 68 pages of examination questions, well-arranged, covering the entire curriculum and running from 1906 to 1911. Applicants for the Fellowship Examination will find these questions, convenient and handy.

The C. V. Mosby Company, of St. Louis, has announced the publication of a book on Pellagra, to be ready by January 1, 1912. This book is being prepared by Doctor Stewart R. Roberts, of Atlanta, Ga., who has just returned from Italy, where he studied the disease in its natural habitat. While in Europe the doctor made extensive research regarding the etiology and treatment of pellagra, and the data contained in the book will reflect the latest and best work that has been done in connection with this disease, making it a reliable guide to those seeking information on the subject.

Diseases of the Ear. By Milligan and Wingrove, a practical handbook for senior students and practitioners. Toronto, The MacMillan Company of Canada.

It is seldom that one sees in a "handbook" such a mass of detail, such an extensive treatment of the subject as appears in this excellent work. One can gather a good idea of the method and the extent of the treatment by a mere perusal of the index which is most admirably arranged for quick reference.

The arrangement of the text also is very practical and the illustrations, many of which are colored, serve to elucidate the surgical and pathological description in a very complete manner.

We are pleased to make a special chapter upon examination of the blood and aural discharges, which have assumed such importance in modern otology.

One of the best portions of the work is that devoted to the labyrinth, for in this we have the latest researches, coupled with the author's extensive experience.

There is considerable space devoted to a description of the diseases and conditions of the nose and throat, which have direct bearing upon the ear. The authors are to be congratulated upon the production of what we think is the best and the most comprehensive text-book upon diseases of the ear in the English language, and a work which would be a useful addition to the working library of any practitioner. We might also add that the book is gotten up with the usual good taste of the publishers, Messrs. MacMillan and Co.

G. R.

International Clinics. Volume I. Series 22, 1912. Philadelphia, London and Montreal. J. B. Lippincott Company.

Wolbarst of New York, gives an excellent paper on the subject of the value and methods of using the three or five glass test in urethral and bladder disease. He is strongly in favor of the catheter glass combination and he ably describes his own experience:—

Surgeon Taylor, U.S.N. writes on venereal disease in the navy, laying stress on his own practice of recommending strict prophylaxis. Cyreax, of London, describes manual methods of treating facial paralysis, and particularly manual vibrations, resistance exercises and stimulating manipulations. His results appear better than electrical methods.

Hexamethylenamine in aural surgery is not overpraised by Hald, the basis for its use is its excretion by the meningeal surfaces.

Finally two papers on dispensing and home sanitarium treatment for tuberculosis close the section on diagnosis and treatment.

Under medicine there is a compact paper by Flexner, collecting the status of our present knowledge of poliomyelitis. Hill writes on diphtheria, particularizing on the use of large doses of antitoxin, and Parkes Weber describes two interesting cases, one with multiple hemorrhages, the other with antiperistalsis, both of functional origin. James J. Walsh has probably the most valuable paper in the book, describing the masked forms of diabetes, and his article is most instructive in showing misleading symptoms.

An article on pellagra and on a new portable water vacuum pump appear rather unnecessary.

Surgical Papers are only three in number, one describing a successful transplantation of a testicle which, however, subsequently atrophied: the second on tic douloureux operations, alcohol, peripheral incision and gasserian: and a third on inguinal hernia. Of the remaining papers, that on the surgical anatomy of the female perineum is the most interesting. A review of medical progress for 1911, closes the volume and its main interest is its section on irregular heart and auricular fibrillation. In brief, the volume contains much that is good, some that is indifferent and nothing that is useless.

G. W. H.

Nervous and Mental Diseases. By Archibald Church, M.D., Professor of Nervous and Mental Diseases and Medical Jurisprudence in Northwestern University Medical School, Chicago; and Frederick Peterson, M.D., Professor of Psychiatry, Columbia University. Seventh edition, revised. Octavo volume of 932 pages, with 338 illustrations. Philadelphia and London: W. B. Saunders Company, 1911. Sole Canadian Agents, The J. F. Hartz Co., Ltd., Toronto. Cloth, $5.00, net; half morocco, $6.50, net.

There is no question in my mind to stating this fact, that of all the works on nervous and mental diseases that are for sale, there is no book on the market which is more valuable than this work of Drs. Church and Peterson.

The volume is not only compact but it is complete and it covers the whole subject in the most satisfactory manner. The brevity of the part allotted to physical diagnosis is expanded under the individual diseases.

The primary chapters on diseases of the nerves are superbly written, with excellent plates and references that show wide reading.

I know of no more satisfactory volume for a man requiring a moderate knowledge of nervous and mental diseases.

G. W. H.

Tuberculosis.

Radcliffe (*The Lancet*) reviews recorded statistics and estimates 20 to 25 per cent. of patients cured under sanatorium treatment. With a combination of tuberculin and sanatorium treatment fifty per cent. of the patients lose their tubercle bacilli.

Diabetes.

Cammidge (*The Lancet*) says, everything depends in the treatment of diabetes, upon systematic dietetic measures, early employed. This diet should be prescribed quantitatively, as well as qualitatively in well-marked, mild or even transient cases of glycosuria. The patient needs to be taught how much fermented food he may, and must take. At first it should all be weighed until the eye can estimate the quantity.

Anal Fissure.

T. C. Hill. (*Boston Med. and Surgical Jour.*) says, palliative treatment is all that is required for simple fissure, without hypertrophy. Where there is slight hypertrophy, excision is sufficient. If moderate degree only dilatation under anesthesia is the best treatment, but if much hypertrophy and spasm excision is the only thing to give permanent relief. At the present time it is better to divide the fibres of the external sphincter muscle through the base of the fissure just to the right or left of the posterior median line, without regard to the location of the ulcer. The incision is to be made at right angles to the muscle fibres, carried outward an inch to secure good drainage. The internal sphincter must not be injured.

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COMMENT FROM MONTH TO MONTH.

"T—i—t—a—n—i—c" spelled the last word in naval architecture. Giant of the Seas, early on the morning of the 14th of April, she went headlong to her destruction, and the whole civilized world was immediately plunged in overwhelming and stupifying horror.

Philanthropist and millionaire, great railway promoter, and distinguished *litterateur*, financier, physician, lawyer, musician, officer, engineer, stoker, sailor, immigrant, men and women in every walk of life—dived into eternity with a calmness beyond conception.

Only when the sea gives up its dead will the truth of the whole horrible calamity be revealed.

From out the dark, tragic gloom shines the splendid heroism and nobility of soul. Not the least of these is that honored band of musicians.

For forty years a sailor physician, Dr. William Francis Norman O'Loughlin, the senior surgeon of the White Star line, died a hero's death, bravely performing his duties to the last.

Nor can one fail to admire the unshaken nerves of the fearless and intrepid wireless operators. There were many acts of true chivalry. Humanity can but sorrow over the lost, and rejoice over the saved.

Dominion Medical Registration we referred to in our last issue, but through a typographical error, the date of passing the original Act was given 1892, when, as is well known, it should have been 1902.

In a letter to the *Ottawa Citizen*, which we reproduce herewith, Dr. R. W. Powell, himself an ardent advocate and earnest worker for this cause, suggests what we heartily endorse, namely, Imperial recognition to Dr. Roddick. A referendum to the Canadian medical constituency would meet with a unanimity of affirmation; and the entire medical profession throughout Canada would hail with infinite gratification and satisfaction due and proper recognition of Dr. Roddick's great services to Canadian medicine, along the lines suggested by Dr. Powell.

Editor Citizen.—It seems only right that credit should be given where credit is due and there is no doubt that hearty congratulations are due over and over again to Dr. T. G. Roddick of Montreal for the noble work he has accomplished at last for the profession of medicine and surgery in this Dominion. After years and years of patient personal labor and the expenditure of brains, money and time, which he never spared, he now sees the fruits of his work and the session of the Ontario Legislature just closed witnesses the final act by the passage of an amendment to the Medical Act, which makes the way plain for the Dominion authorities to now organize and bring into force a Dominion Medical Council, which will be authorized to arrange for the granting of licenses to practise medicine and surgery and such licenses will henceforth be recognized by every province in Canada and the holder thereof be entitled to practise his profession wherever he chooses within the borders of the Dominion.

It is too long a story to print in a daily paper, but it will suffice to say that this idea has been prominent in the minds of the profession and has never once been lost sight of since 1867, the year of Confederation, when the scheme was first mooted, when Sir Charles Tupper, M.D., was president of the Canada Medical Association.

Great obstacles had to be overcome, compromises of various kinds had to be conceded and much diplomacy used. It is well known that Dr. Roddick sought a seat in Parliament for the express purpose of being in a position to further this important work. What he did and how he worked will never be known to anybody, but the writer of this letter is personally aware of a great deal of it. Prejudices of all kinds had to be overcome, but

Dr. Roddick's pluck never for one instant failed him and in 1902 he accepted the bill then put on the statute book, emasculated as it was, and rendered inoperable, by the insertion of a few words that compelled all the provinces to agree to its provisions before it could be brought into force. This I say was accepted by Dr. Roddick as a stepping stone and now after ten years further work he has the satisfaction of knowing that he has succeeded in bringing all the provinces into line and the enabling clause has been passed by all the legislatures.

I do hope that Dr. Roddick's work will be duly recognized, by the powers that be, because his labors have been truly Imperial and will place Canada in the foremost rank as regards medical registration.—(Sgd.) R. W. POWELL, M.D.

180 Cooper St., Apl. 27, 1912.

The Seventeenth International Congress of Medicine will be held in London, August 6th—12th, 1913. The Canadian representatives are: Executive Committee—Dr. W. H. B. Aikins, Toronto; Dr. A. McPhedran, Toronto. Organizing Committee—Dr. George Armstrong, Montreal, President of the Canadian Medical Association; Dr. C. K. Clarke, Dean of the Medical Faculty, University of Toronto, Dr. J. C. Connell, Dean of the Medical Faculty, Queen's University, Kingston; Dr. H. H. Chown, Dean of the Medical Faculty, University of Manitoba, Winnipeg; Dr. E. P. Lachapelle, Dean of the Medical Faculty, Laval University, Montreal; Dr. F. J. Shepherd, Dean of the Medical Faculty, McGill University, Montreal.

Safe water supplies in the control of typhoid fever are absolutely essential.

As pointed out in a reprint from the Public Health Reports of the United States, by Allan J. McLaughlin, these must be safe for 365 days of the year, as it is not sufficient to have a safe supply for 360 days, and boiled water for the other five.

It is lamentable that the average citizen and even the average medical man, takes such scant heed of sanitary problems; and even in an altogether preventable disease as typhoid fever, look with complacency upon a mortality rate of 20 deaths annually in 100,000 population.

In the matter of a low death rate, European cities put American sanitation to the blush. Ten European cities, representing a

population of 15,000,000, show an average death rate for ten years of 3.4 per 100,000 of the population. For 1910, these same 10 cities show a mortality rate in typhoid of 2.5.

Compare these statistics with the fifty cities of the United States having a population of over 100,000. One city has a death rate of 5. Three have rates below 10 in 100,000. Twenty-two other cities have rates from 11 to 20, while the remaining 24 cities have rates running from 20 to 86. This is astounding.

On the average then, in every 100,000 of the population of the United States there have been 18.5 deaths and 180 cases of typhoid fever which should have never occurred; and a conservative estimate for 1910 places the deaths from typhoid fever above 25,000. Then when it is remembered that in the smaller cities and rural districts the rate is in general, higher, the conclusion is drawn that the typhoid death rate in the United States is not below 25 in 100,000 of the population.

If these deaths all occurred at one spot at one time the world would be as much horrified as by the dreadful maritime disaster of the past month, and would awake to the great opportunities sanitary science and public medicine present in the curtailment of all preventable diseases.

Under the patronage of Field-Marshal, His Royal Highness The Governor-General, the Twelfth Annual Meeting of The Canadian Association for the Prevention of Tuberculosis will be held in the Margaret Eaton Hall, Toronto, Monday and Tuesday, 20th and 21st May, 1912, beginning on Monday at 10 a.m.

News Items

Dr. J. W. Stirling, Montreal, has returned from a trip abroad.

Dr. R. W. Mann, Toronto, has gone for graduate work to European hospitals.

Dr. T. G. Roddick has returned to Montreal from Atlantic City.

Dr. C. C. Richardson has sold his practice in Aurora and moved to Toronto.

Dr. Clemensha, Port Hope, died recently in the Toronto General Hospital. The late Dr. Clemensha was one of the most prominent practitioners of Eastern Ontario.

Academy of Medicine, Toronto, has elected the following officers: President, Dr. R. A. Reeve; Vice-President, Dr. H. J. Hamilton; Secretary, Dr. Harley Smith; Treasurer, Dr. W. A. Young.

Dr. A. K. Haywood, Toronto, has passed the examinations of the conjoint board of the Royal College of Physicians and Surgeons in England. Dr. Haywood will pursue graduate work some months on the Continent.

Dr. D. W. Carroll, one of the oldest practitioners in Western Ontario, died suddenly in Ingersoll on the 25th of April. He had practised there over fifty years, and left his residence and grounds for a childrens' hospital.

The Canadian Government spent, in 1910, $377,485 for the public health service. The Department of Agriculture spent $146,781; Indian Affairs, $125,121; Interior, $66,969; Inland Revenue, $38,613. Greater efficiency and economy is expected when the health services are all administered under one department.

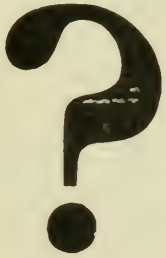
The Medical Department of the Western University at London, Ontario, held its annual convocation on the evening of May 2nd. Dr. W. H. Moorhouse presided. The graduating class numbered thirty-eight, the largest in the history of the university, and the second largest in Canada in 1912. Dr. J. Moriarty delivered the valedictory, to which Dr. H. A. MacCallum replied, advocating a million dollar endowment fund for the Medical Department, which would begin next season's work with five professors devoting their whole time to medical teaching.

Publishers' Department

Detroit, April. Another world's record for automobile shipments has been broken in Detroit. The Ford Motor Company for the past month has exceeded even its own world beating records, having shipped 8004 cars in the twenty-seven shipping days. This is an output absolutely unprecedented in automobile history anywhere in the world—and is a matter of much comment among the automobile contingent of Detroit. Mr. N. A. Hawkins, commercial manager of the Ford Company, is authority for the statement that the tremendous Ford schedule of 75,000 cars to be manufactured in 1912, will be produced on scheduled time as planned. There are indications, however, that the demand will far exceed the supply and that the entire Ford output will be sold before the season is much farther advanced. The company has not been able to keep pace with its bona fide orders. Long ago it made preparations to produce a definite allotment of cars each month of 1912, and it will not exceed this allotment, even at the determined instance of dealers, because it will not run chances of lowering its high standard of production. Mr. Hawkins expects, however, in the current month to see another record smashed.

I have used Resinol Ointment and Resinol Soap in my family and also in my practice for over fourteen years and have never found anything to equal them. I have also recommended them to hundreds of my patients suffering from skin diseases, and they are all grateful to Resinol Ointment and Soap which gave them relief at once.—B. F. Tillyer, D.D.S., Orange, N. J.

Pleurisy and Tuberculosis.—Every case of "cured" pleurisy should be closely watched for many months after the patient has been actually ill with the disease. It is probably correct to say that considerably more than half such cases develop tuberculosis years after. Indeed Köster, Landouzy and others consider pleurisy with effusion a symptom of existing, though latent tuber-



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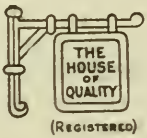
culosis. Köster states (*Zeitschr. für klinsche Medizin*) that in persons over fifteen years of age tuberculosis develops in at least one half the cases after the occurrence of idiopathic pleurisy with effusion. Tuberculosis developing after wet pleurisy in older persons runs an acute course and has a bad prognosis. After idiopathic dry pleurisy (which is rare in children) about 40 per cent. of the cases develop manifest tuberculosis. In most cases tuberculosis becomes evident in five years after dry pleurisy or pleurisy with effusion.—*Am. Pract.*

The Safety of Chloroform in Labor.—It has long been known that the highest mortality from the administration of chloroform as an anesthetic has occurred when this drug was employed by dentists, not necessarily because this class of practitioners is less skilful in its use, but probably because the drug was commonly administered when the patient was in the sitting rather than in the prone position, and therefore the fall of blood-pressure, which is so characteristic of the early influence of chloroform, exercised a greater effect upon vital centres. Conversely, it has been universally recognized that the mortality rate from the use of chloroform during parturition is extraordinarily low. It has been thought by some that this was due to the fact that less chloroform was used, and by others that the immunity of the parturient woman depended upon the fact that hypertrophy of the heart, which is supposed to develop during pregnancy, acted as a protective; but these two reasons seem hardly adequate, since the chloroform is often given to the parturient female by unskilled hands while the physician is busy with the delivery. Further, it is a question whether there is any actual hypertrophy of the heart in pregnancy which would enable it to resist chloroform. Finally, it has been pretty well proved that, except in cases of myocardial disease, chloroform does not produce death by its direct action upon the heart. It would seem that a more reasonable explanation for the immunity of this class of patients to chloroform depends upon the fact that the patient does not take it constantly, and furthermore that each succeeding pain acts as a distinct stimulant to the vasomotor centre which is ordinarily much depressed by this drug, it being well known to physiologists that pain produces a marked rise in blood-pressure. That death does occasionally ensue from the use of chloroform in labor, must, of course, be recognized, and a case of this



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character has been reported in the *Atlanta Journal-Record of Medicine* for November, 1911, by Hodgson, who records the case of a woman of 24, a primipara, who was delivered by the aid of forceps. She had been in hard labor for some time. After what was apparently a moderate amount of chloroform had been used the patient stopped breathing, just as the head passed over the perineum, and all efforts at resuscitation failed. There is no record of an autopsy to reveal the condition of the heart, but it is said that the patient had the appearance of a normal, healthy woman, and that at no time was she very deeply under the influence of the anesthetic.

Frequency of Tuberculous Infection in Children.—Although some 30 years have passed since the discovery of the bacillus of tuberculosis, no absolute certainty exists as to the exact way in which infection is most commonly produced. Koch's original opinion, that inhalation of organisms derived from human disease is the important factor, still commands pretty general assent, but another school has arisen which holds that infection starts in infancy by consumption of tuberculous milk, the bacilli lying latent until some depression of vitality in after life gives them a chance to multiply and cause serious disease. In view of the existing doubt it is important to obtain trustworthy information as to the frequency of tuberculous infection in infants and children and as to the apparent portal of entry of the germs. As to the frequent occurrence of tuberculous foci in children authorities are agreed, statistics derived from post-mortem examinations giving a percentage of infected cases varying from 35 in London (Still) to 42.5 in Christiana (Harbitz). Attempts to obtain further information by the employment of the tuberculin test have also been made, the results confirming the view as to the frequency of infection in children. A recent investigation on these lines has been carried out by Dr. Charles McNeal and recorded in the *Edinburgh Medical Journal* for April. The investigation concerned a series of 541 cases, 371 of these being children in the Royal Edinburgh Hospital for Sick Children and the others 170 boys in an industrial school. The method of employing the tuberculin was a modification of von Pirquet's procedure, undiluted "old" tuberculin being rubbed into an abraded point of skin. The results obtained showed, even within the first year of life, a percentage of infection of 14.1, the ratio rising till

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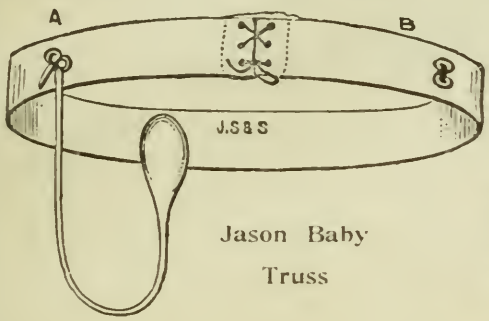

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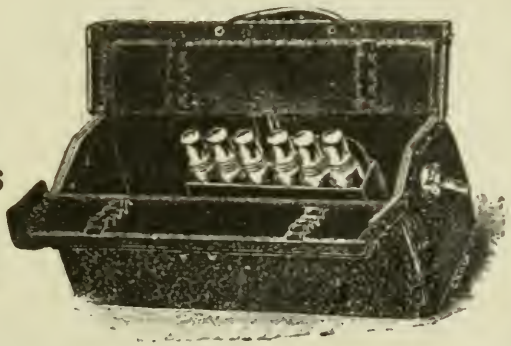

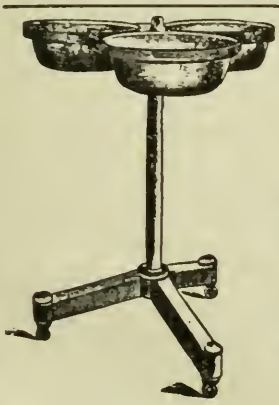

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it attained a height of 46.6 in the fourth and fifth years of life. Among the boys of the industrial school, drawn from the most necessitous classes, the percentage of infection actually reached a figure of 64.7 in boys aged 15 years. It was remarkable, in comparing the figures with those recorded by von Pirquet and others in Austria, that whereas the general mortality from tuberculosis in the latter country is much higher than in Scotland (36.25 compared with 12.53), in Edinburgh the percentage of infection among children was actually greater. The more frequent occurrence of abdominal tuberculosis among children in Great Britain suggests that infection by tuberculous milk may be the factor which explains the unfavorable conditions thus revealed.

A New and Promising Agent for the Treatment of Rheumatism.—An announcement that is certain to cause widespread interest among the profession is being made in medical journals in behalf of Rheumatism Phylacogen. The new product is a bacterial derivative originated by Dr. A. F. Schafer, of California. The term "'Phylacogen" (derived from two Greek words—the equivalent of "a guard" and "to produce") means "phylaxin producer," phylaxin being a name that is applied to a defensive proteid found in animals that have acquired an artificial immunity to a given infectious disease. Rheumatism Phylacogen (Schafer) is a sterile aqueous solution prepared from a large variety of pathogenic bacteria, such as the several staphylococci, Streptococcus pyogenes, Bacillus pyocyaneus, Diplococcus pneumoniae, Bacillus typhosus, Bacillus coli communis, Streptococcus rheumaticus, Streptococcus erysipelatis, etc. The basic Phylacogen is a "polyvalent" preparation, since the organisms are obtained from cultures made at frequent intervals and from a variety of sources. To this basic material is added an equal amount of the filtrate obtained by similarly growing and treating the Streptococcus rheumaticus of Poynton and Paine. The product is indicated in all cases of rheumatism, acute and chronic, not due to gonorrheal infection. It is marketed in sealed glass vials of 10cc. capacity and may be administered subcutaneously or intravenously, the former method being preferred except in cases in which quick results are demanded. Rheumatism Phylacogen, which is the first of a series of phylacogens originated by Dr. Schafer and about to be offered to the medical profession, has been thoroughly tested clinically in many of the leading hospi-

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tals, as well as by competent specialists and other scientific men in various parts of the country, and is said to have shown brilliant results in a large percentage of cases. With the co-operation of Dr. Schafer, and in accordance with his methods, it is prepared by Parke, Davis and Co., in whom are vested the sole rights of manufacture and sale. Physicians who are interested in this new treatment for rheumatism, and every general practitioner ought to be, will do well to get descriptive literature on the subject. It may be obtained by addressing the manufacturers at their principal laboratories in Walkerville, Ont. Ask for the "Rheumatism Phylacogen pamphlets" and mention this journal.

Repeated Attacks of Appendicitis.—N. Wolkowitsch (*Ztbl. f. Chir.*), in over 30 cases of recurrent appendicitis, has observed more or less marked relaxation of the abdominal muscles on the right side. This is due to a diminution of the muscle tone brought about through disturbance of the nutrition of the muscle tissue. It manifests itself by atrophy in the same manner as the muscular atrophy of diseases of the joints. Then, the muscles on the right side take part to a less extent in respiration, a contributing factor to their atrophic condition.

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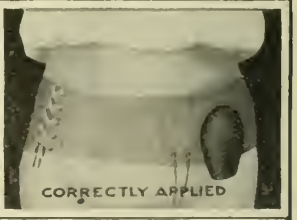

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Herbert A. Bruce F.R.C.S

Surgeon to Toronto General Hospital.

Dominion Medical Monthly

And Ontario Medical Journal

Vol. XXXIX. TORONTO, JULY, 1912. No. 1

Original Articles

PRESIDENTIAL ADDRESS.*

By Herbert A. Bruce, M.D., F.R.C.S.,

President of the Ontario Medical Association; Associate Professor of Clinical Surgery, University of Toronto; Surgeon to the Toronto General Hospital.

Owing to the custom which has prevailed of electing your President at the end of the Annual Meeting, this is the first opportunity that has been afforded of thanking you for the distinction which you were good enough to confer in electing me to fill this very important position. While fully appreciating the honor which you have done me, and for which I am most grateful, at the same time I am fully aware that it carries with it very serious responsibilities. On looking back over the long list of distinguished men who have preceded me, I realize that it is a difficult task to maintain the high traditions of this office. I need scarcely say that I have done my best to justify the confidence you have placed in me, and have been exceedingly fortunate in securing on the various committees the assistance of able and energetic men, who have devoted a great deal of time and consideration to the working out of the details connected with this meeting.

As you will see from the programme, we have very considerably altered the character of the meeting. Realizing the interest and value of clinical work, instead of having sessions devoted to the reading of papers, we have endeavored to make the meeting entirely a clinical one, and I trust that the result will justify the experiment.

In view of the fact that members from a distance could not conveniently bring cases to the meeting, and wishing to give them an opportunity of taking part in the proceedings, we have asked

* Delivered at the Thirty-second Annual Meeting of the Ontario Medical Association, held at Toronto on May 21st, 22nd and 23rd, 1912.

them to give us short case reports, and have in this way secured a few short papers.

We felt that the presentation of clinical cases, with the ensuing discussions, would be of much greater interest and advantage to the profession than listening to a number of lengthy papers. Our policy has been to invite members outside the city of Toronto only to take part in the symposia and to read papers, and it was only because, in some of the sections, we failed to secure a sufficient number in spite of repeated appeals, that we have had to fall back upon some of the Toronto members. I think the members of the Association generally do not fully realize the extreme difficulty, often amounting to impossibility, of securing papers from members in country districts.

Whilst we have endeavored to provide a varied and interesting clinical programme, we have not been unmindful of the social side, and I therefore hope you will find the meeting both instructive and enjoyable.

I should like to take this opportunity of referring to the great loss which the profession in the Province of Ontario has sustained in the untimely and tragic death of a former President of this Association, the late Dr. James F. W. Ross. He always took the keenest interest in the affairs of this Association, and was present at our last meeting at Niagara Falls. He could always be relied upon to do his utmost to further the interests of his beloved profession, and it is scarcely necessary for me to say that the profession, as a whole, and this Association in particular, has lost a very staunch friend, and one whose place it will be difficult or impossible to fill.

I should like also to refer to the loss which the profession throughout Canada has sustained in the death of Dr. James Bell of Montreal. He was one of our truly great men, and has done a great deal to elevate the standing of the Canadian medical profession.

As each year of my professional life passes, my conviction becomes stronger that an organization of some kind to bind the profession together is an absolute necessity, and that for this purpose we could have nothing better than our Ontario Medical Association, which is a potent influence for the good of the profession and the public.

When it was first suggested that this Association should become a branch of the Dominion Medical Association, many of us feared that in this way we might lose our identity. As the scheme has eventually materialized, however, I think it a distinct advantage

to the Ontario Medical Association. Whilst we have retained our autonomy, and are thriving and prosperous, we are at the same time—I think I may say without boasting—the most important branch of the Dominion Association, and can feel that our interest is not merely provincial, but that we have a larger and wider outlook through our connection with the National Association.

I think it very desirable that there should be an increase in the number of small County Medical Societies, and I should like to suggest that for this purpose the Province be divided into ten districts, corresponding to the ten health districts recently established by the provisions of the new Health Bill. As there are forty-seven counties in the Province, this would mean that each society would include four or five counties, which appears to me to be a practical arrangement. Then the method of securing membership in the Ontario Medical Association would be simplified by accepting the members of these smaller societies, which would obviously be in a better position to determine their qualifications.

When the Ontario Medical Council was first established there were three Licensing Boards in Canada, in addition to the medical schools and universities, namely, the Upper Canada, the Homeopathic and the Eclectic Medical Boards. The universities, in addition to conferring degrees, really possessed licensing power, inasmuch as the holder of a university degree was entitled to practise medicine on proving his identity and paying a small fee. The Provincial license enabled the holder of it to practise in the Province conferring it, or, in fact, in any other Province, so that as a matter of fact there were in Upper and Lower Canada, exclusive of the other Provinces now constituting the Dominion, seven or eight Licensing Boards responsible to no central authority. On the establishment of the Ontario Medical Council it became the central authority and the only licensing body.

Before this time the schools and universities fixed their curricula, both for matriculation and professional examinations; some of the Licensing Boards required no standard of matriculation at all, and the professional acquirements necessary to become a practitioner of medicine were of a very inferior character.

The first step taken to remedy this state of things was the "Parker Act," passed in 1865, providing for the formation of a Council with power to fix the standard of matriculation and that of the medical curriculum, but giving it no power to enforce this standard. The Homeopathic and Eclectic Boards were not interfered with, and the provisions of the Act were found to be very defective. An arrangement was then made with the homeopaths

and eclectics and the various schools and universities, whereby the whole of the profession became subject to the Medical Council of Ontario, as a central authority. This Council was made up of representatives, elected from and appointed by the general profession, the medical schools and universities, and also from the homeopathic and eclectic bodies. This Act came into force in 1868, and conferred upon the Council power to fix the standard of all examinations and appoint examiners to conduct them.

Prior to 1867 the matriculation examination of our colleges was simply a matter of form, and could be passed at any time before going up for the degree. Now it is equivalent to a second-class teacher's certificate, with compulsory Latin and physics and the science course. I believe that at the present time all the colleges and universities in the Dominion require four years of study before a student goes up for his degree, and in McGill University and the University of Toronto five years are required.

The President of the University of Toronto, in his last published report, suggests that the entrance standard for medicine in the University of Toronto shall be senior matriculation, which really amounts to the first year at the University, and I may say that recently the Medical Faculty has recommended to the Senate that an examination equivalent to that of senior matriculation shall be demanded of all students entering the Medical Faculty of the University of Toronto in future.

Last year the Ontario Medical Council very wisely decided to discontinue its Primary and Intermediate Examinations, accepting the Primary and Intermediate Examinations of the Universities, and only requiring a Final Examination in Medicine, Surgery and Obstetrics. As soon as the Dominion Medical Council comes into operation, it would seem unnecessary for the Ontario Medical Council to hold even the Final Examination, as a student would naturally prefer to take the examinations of the Dominion Medical Council, which would entitle him to practise in any part of the Dominion. This takes away one of the functions of the Ontario Medical Council, and while it may have other duties to perform of a sufficiently important character to justify its existence, I think there is a general feeling that its numbers might, with advantage, be greatly reduced.

The number of homeopathic representatives is altogether out of proportion. Through the courtesy of the Registrar, Dr. Bray, I have learned that there are 48 homeopaths practising in the Province, and 3,280 regular practitioners. These 48 homeopaths have 5 representatives on the Council, that is to say 1 to about every 9½.

The 3,280 regular practitioners have 18 representatives, and if we add to these the six representatives from the colleges, making 24 altogether, we may say that they have one to every 136. Amongst the members elected from the colleges we find that there is a representative for Victoria University, for Trinity University and for Ottawa University, none of which have medical faculties, and I can see no reason whatever why they should continue to have representatives on the Council.

I would suggest that the Ontario Medical Council consist of ten members, one to be elected by the homeopathic physicians, and three to be elected by the universities having medical faculties, leaving six to be elected by the general profession. Even this gives the homeopaths a predominance in the Council quite unjustified by their numbers, and with the diminished amount of work required from the Ontario Medical Council this should be a sufficiently large body.

Medical Education.

The question of medical education is at the present time receiving a considerable amount of attention, and both the teaching and practice of medicine are passing through a period of evolution. In the United States medical education has been a subject of discussion for a number of years, and committees have been appointed by various societies, more especially the Association of American Medical Colleges, in conjunction with the Confederation of Examining Boards of the United States and the Council of Medical Education of the American Medical Association, to enquire into the equipment, entrance requirements and curricula of the medical schools.

In 1905 the Carnegie Foundation was established by Mr. Andrew Carnegie[1] to investigate the subject of University Education in general, and a special committee was appointed to consider medical education in the United States and Canada. The report of this committee and the recommendations of the Council on Medical Education of the American Medical Association[2] show that the most urgent indications are reduction in the number of medical schools, elevation and uniformity of entrance requirements, maintenance of well equipped laboratories with capable teachers, and clinical training in a hospital in intimate relationship with the medical faculty—that is to say, in a properly constituted teaching body, there should be a hospital under the direct control of that body. The report of the Carnegie Committee also emphasizes the fact that the medical profession, both in the United States and

Canada, is at present overcrowded by poorly trained physicians and surgeons.

At the meeting of the Council on Medical Education[3] held at Chicago on February 29th of this year, the Secretary reported that whereas in 1906 there were 170 medical schools in the United States, constituting half the total number existing in the world, the number had now been reduced to 120. This reduction is due to the closing of some badly conducted and imperfectly equipped schools and the amalgamation of others.

As regards entrance requirements, Dr. Colwell stated at the above meeting that 47 of the 120 remaining medical colleges now require that a year or more should have been devoted to physics, chemistry and biology, together with a four-year high school course. Twenty-nine colleges require a minimum of two or more years' work in a college of liberal arts, with a four-year high school course. Nine state examining boards have now adopted preliminary requirements in excess of a four-year high school education. Of the 120 colleges, 79 are connected with liberal arts colleges or universities, but of these 33 only are in intimate relationship with universities. During the last seven years the college terms have been lengthened, new methods of teaching adopted, more salaried teachers employed, more endowments secured, new buildings erected, better laboratories and laboratory equipment, and better clinical facilities provided. Several of the larger medical schools have been reorganized, have built teaching hospitals and adopted higher standards of education, and the teaching of medicine has now been placed to a great extent on a university basis throughout the United States.

As regards Europe, in London there is more clinical material available than in any other city in the world, and the conditions for teaching are most favorable; and, in my opinion, there is no place at which one can get a better training in the fundamental principles underlying the practice of medicine. This, together with the exceptional clinical facilities, makes London the greatest medical centre in the world. In the University of Berlin no senior professor practises medicine. The universities, which are maintained by the State, pay salaries to the professors, surgeons and physicians, and also all expenses connected with the laboratories.

I am of opinion that, as education is a matter within the jurisdiction of the provinces of this Dominion, it is the imperative duty of the Provincial Governments to see that a certain definite standard of medical education is maintained, the individual medical colleges retaining their charters only if they continue to provide this standard. It will be their duty to see that these colleges are

provided with proper laboratory accommodation and facilities, and —what is perhaps equally or more important—a sufficiency of clinical material in hospitals connected with or under the control of the college.

Medical education attains its maximum efficiency only when it it is based upon a good system of general education and is supported by the scientific and literary atmosphere of a university. Three of the greatest advances in modern medicine are due to laboratory work, namely, the work of Faraday in physics, of the Curies in chemistry, and of Pasteur in biology. Sir William Osler[4] thinks it advisable that this type of university work should be extended into our medical schools, and that we need "an active invasion of the hospitals by the universities." In the city of Toronto we now have what may be described as "an active invasion of the hospital by the university," in that the University of Toronto now has control of the Toronto General Hospital, thus making the latter to all intents and purposes the university hospital. We have here what is generally recognized as the essential thing in the training of medical students, namely, the intimate connection with and active control of the hospital by the university. When our new arrangements are in working order we hope to be able to give our students a great deal of clinical work in the hospital, so that they may thus have an opportunity of acquiring that familiarity with disease processes in the living subject which is so essential as a qualification for their life's work.

Medical education in Canada has always been up to a high standard. But in this connection it should be borne in mind that, owing to the development of the preliminary sciences, such as physiology, pathology and biology, the work of the student has practically doubled in amount, and is continually increasing. In view of this increased demand on the time of the student, a five-year course in medicine has now been adopted in all the leading Canadian medical schools, the final two years being devoted to practical work.

All writers on medical education emphasize the paramount importance of thorough training in practical work, with opportunities for the students to come into actual contact with patients. The efficiency of the practitioner, the welfare of the public generally, and the adequacy of the public health service are all dependent upon the quality of the training given in the medical schools, and the ideal at which we are aiming is uniformity in the requirements and standards exacted by all the examining boards throughout the country. We trust that this happy result will follow the adoption

of the "Canada Medical Act," establishing interprovincial registration, and a license which will enable the holder of it to practise in any part of the Dominion.

The "Canada Medical Act."

The "Canada Medical Act," which has for its object the establishment of a uniform standard of examinations and qualifications throughout the Dominion of Canada, was introduced in the Senate by Dr. Roddick in 1902. It was passed, but it was found impossible to bring the Act into operation at that time, owing to the fact that opposition was made by some of the provinces on the ground that their interests had not been sufficiently considered.

Owing to Dr. Roddick's perseverance and devotion to the work in connection with this bill, and that of a few others who co-operated with him, he succeeded in convincing the various provinces that it was to their interest to pass this bill, and consequently an amended bill was passed in the 1911 session of the Dominion Parliament. I wish here to express my sense of the debt of gratitude which we owe to Dr. Thomas G. Roddick for the unprecedented services which he has rendered to the entire medical profession of Canada.

This amended bill only became operative when a so-called "Enabling Clause" had been passed by every province. All the provinces have now passed this "Enabling Clause," Ontario being the last to do so. This means that now the "Canada Medical Act" is in operation, and it only remains for the Dominion Medical Council to be established in accordance with the terms of the bill, which are, briefly: That the Council shall consist of (*a*) three members, appointed by the Governor-General in Council, each residing in a different province; (*b*) two members, representing each of the nine provinces, to be elected by the Provincial Medical Council; (*c*) one member from each university or medical college, which has power to confer degrees in medicine; and (*d*) three members elected by the homeopathic physicians in Canada.

Osteopathy.

The bill which was recently introduced by Dr. Jamieson, and which was withdrawn at the last session, contained a clause defining medicine, which, it is to be hoped, will be incorporated in a bill which will probably be passed at the next session of the Legislature. It is a great pity, as we all know, that this was not defined by the Legislature many years ago, when the Council was estab-

lished in 1867, and it is desirable that the profession should be thoroughly conversant with the terms of this bill.

The bill provides for the registration of any person who has matriculated in accordance with the requirements of the College of Physicians and Surgeons of Ontario, and holds a diploma granted by a school or college of osteopathy recognized by the American Osteopathic Association and has attended such osteopathic school or college for the time specified in the bill. It also provides for the registration of persons who have been practising osteopathy in Ontario prior to the passing of the bill, provided they hold such diplomas. It also provides that any person shall be held to practise medicine within the meaning of the Act who shall by advertisement, sign or statement of any kind allege ability or willingness to treat diseases, or to prescribe or administer medicines or treatment of any kind for diseases, defects, deformities or injuries, but specifies that this section does not apply to the practice of dentistry, pharmacy, the usual business of opticians, vendors of dental or surgical instruments, apparatus and appliances, nurses, chiropodists, bath attendants or proprietors. Every person registered under this Act as a practitioner of osteopathy in the Province of Ontario shall be entitled to recover fees for professional attendance.

This amendment to the "Ontario Medical Act," which permits of the registration of osteopaths, is not such a monstrous thing as it seemed at first. I take the view that a man is justified in practising any pathy he wishes, provided he has obtained a sufficient knowledge of the anatomy of the human body, its physiology, and the disease processes to which it is liable. It will be obvious to every sane man that such a knowledge is absolutely essential; for how can anyone attempt to treat a disease without understanding the nature of the disease in question or normal conditions?

At the present time the public is at the mercy of a large number of uneducated charlatans, whose work is not only of no value in any real disease, but is often of a highly dangerous character. We have all met with cases in which this lack of knowledge has resulted disastrously to the unfortunate patient.

If, as is proposed in the bill, those wishing to practise osteopathy must pass an entrance examination equal to that of any practitioner of medicine, and, in addition, pass a primary and final examination, which would include all the essential subjects, substituting their pathy for medicine, we should have no objection to their being licensed by the Ontario Medical Council. In this way the public would be protected by requiring of osteopaths a sufficient know-

ledge of these fundamental subjects, which is absolutely essential before attempting to treat the sick. If, after they have passed these examinations, they still think there is any value in their particular pathy, we have no objection to their practising it. I would take a similar attitude towards any other pathy.

When the Ontario Medical Council was organized the homeopaths and eclectics were taken in and the same examinations prescribed for them as for regular practitioners. What has been the result? The eclectics have practically ceased to exist. Very few homeopaths have been taking the examinations, as is shown by the fact that at the present time only 48 are practising in the Province of Ontario; but, unfortunately, I am unable to ascertain how many there were at the time of the formation of the Ontario Medical Council.

The only objection I have to the bill is that it proposes to take in a number of graduates of certain American colleges without passing any further examination. I think that a clause should be added requiring all these men to pass an examination before being registered; and although we may, for the time being, have to accept qualifications which are decidedly less than those which will be exacted from future candidates, we shall certainly have made a material advance in securing for the public very valuable protective legislation.

In support of the contention that those who are practising osteopathy at the present time should pass an examination I should like to briefly refer to the Carnegie report:—[5]

"Amongst medical sectarians the committee includes homeopaths, eclectics and osteopaths, all of whom admit in theory that medical education should be based upon the fundamental sciences of anatomy, physiology, pathology and bacteriology."

It is stated that the catalogues of the eight osteopathic schools in the United States are a "mass of hysterical exaggerations, and fairly reek with commercialism." Entrance standards are conspicuous by their absence. In the catalogue of the parent school at Kirksville it is stated that an applicant will be accepted if "he pass examinations in English, arithmetic, history and geography," but he may be admitted even if he fails to do this. The Cambridge School (Massachusetts) states that "a diploma may be accepted or an examination required if deemed advisable by the directors."

Whatever his opinions may be on the subject of treatment it is essential that the osteopath should be trained to recognize and to differentiate between the diseases he professes to treat, and not one of these osteopathic schools is in a position to give the training in

physiology, pathology, chemistry and bacteriology which "osteopathy itself demands." In none of them is there any effort to connect the "laboratory teaching with clinical osteopathy," and in none is there "anything approaching the requisite clinical opportunities."

In the eight osteopathic schools there are now over 1,300 students, paying about $200,000 annually in fees, and for this they "receive an education which is practically worthless."

All candidates who intend to practise surgery—whether osteopaths or not—should be required to pass a uniform examination in this branch of treatment. It is absolutely essential that all who undertake the treatment of disease, irrespective of the form of treatment they propose to adopt, shall be educated in such a manner as to render them capable of distinguishing between the various diseases which may come under their observation.

Public Health.

The rapid development of bacteriology and the establishment of the germ theory of infective diseases, due mainly to the scientific investigations of Koch and Pasteur, have led to corresponding development in practical and preventive medicine. Recognizing the importance of this development in relation to public health, Senator Owen, of Oklahoma, introduced a bill in Congress about two years ago to provide for the creation of a federal department of public health, which was strongly supported by the American Medical Association and various other medical societies in the United States.

The object of this bill was defined to be[6] "all matters pertaining to the conservation and improvement of public health, and to collect and disseminate information relating thereto." It also provided that the new Department of Public Health should include: (1) The Public Health and Marine Hospital Service; (2) foods and drugs, from the Bureau of Chemistry, which is now in the Department of Agriculture; (3) vital statistics, now in the Department of Commerce and Labor.

An amended draft of the Owen bill has recently been brought before the Senate,[7] which differs from the original Owen bill, in that it provides for an independent health service, at the head of which will be a director appointed by the president, but who is not to have a seat in the Cabinet, whereas the original Owen bill specified that the head of the department should be a physician, who would also be a member of the President's Cabinet. The amended

bill provides for the appointment by the President, with the approval of the Senate, of three commissioners of health, to act as assistants to the director, two of whom shall be skilled sanitarians and one a skilled physician.

On March 22nd, of the present year, Senator Smoot brought a bill before the Senate,[8] which contains practically the same provisions as regards the Federal Government, but varies essentially from the Owen bill, in that it arranges for the public health service to be under the control of the Secretary to the Treasury, and to be managed by an assistant secretary, who shall devote the whole of his time to public health work, thus ensuring representation in the Cabinet. The Medical Bureau, including the present Health and Marine Hospital Service, is made the predominating bureau, and it is proposed to transfer vital statistics to this department.

I have referred to this contemplated legislation in the United States in order to show what is being done elsewhere in regard to public health matters. Many of us have felt for years that a federal department of public health should be created, with a responsible minister at its head, and representations were made to the late Government by the Canadian Medical Association along these lines, but no action was taken.

I intend proposing a resolution to this effect during the course of the meeting, urging the Dominion Government to give this matter early and favorable consideration.

Early in the present year the Academy of Medicine, New York,[9] appointed a committee on public health, hospitals and budget, for the purpose of investigating existing conditions, and to give expert medical opinion upon various matters, including provision for contagious diseases, school sanitation and the use of public funds in the maintenance of public health, one of the most important being the consideration of the health of school children. The committee is not to interfere in political matters, but to endeavor to give such advice as will be serviceable to the community as a whole. This will include attempts to educate the laity to minimize conditions which tend to the spread of occupational diseases, and to educate general practitioners in matters relating to municipal health, sanitation and hygiene. We might with advantage follow their example.

Division of Fees.

Considerable attention has recently been directed, more especially by the various medical and surgical societies throughout the United States of America, to the prevalent practice of fee-splitting,

or the division of fees between consulting surgeons and physicians, or physicians and consulting physicians.

Judging from the papers which have recently been published, and the reports of the committees which have been appointed to enquire into the subject,[10] this reprehensible practice appears to have become exceedingly common. It is increasing to an alarming extent amongst the younger members of the profession, and has even been adopted in some cases by men of good standing, owing to the fact that it suits their convenience and that they find it profitable.

The division of the fee is accomplished by various methods, and is based on commercialism alone. It means nothing more or less than the payment by the consultant of a commission to the general practitioner, with the object of encouraging the latter to continue to send his patients where he is most likely to receive a share of the money paid for relief or attempted relief, irrespective of the skill and experience of the consulting surgeon or physician in question. The practice is even more common amongst surgeons than physicians, and is carried on without the knowledge of the patient, who is ignorant that a portion of the money, amounting, according to the report of the committee of the Erie County Medical Society,[11] to from 25 to 50 per cent., goes to the general practitioner who has recommended the surgeon.

There can be no question that it is a pernicious system, fundamentally opposed to the ethical traditions of the profession, and that it cannot be advocated by any honorable man. It represents a form of collusion between the consultant and the general practitioner, which is compromising and demoralizing to both parties, in that it is invariably practised without the knowledge of the patient, and is at the same time disadvantageous to the latter.

As regards the causes responsible for the prevalence of this evil, it is stated in the report referred to above that the committee was practically unanimous in the opinion that the principal predisposing factors in commercialism are the overcrowding of the medical profession, a low standard of medical education, and a lack of appreciation of professional ethics. The committee also includes amongst the contributory causes contract practice and its inadequate remuneration, and the fact that the general practitioner is often underpaid. This state of things should be rectified in a legitimate manner, by educating the public to understand that, in view of the advances in medicine and surgery, and the consequent increase in responsibility and work necessitated by modern methods of diagnosis, the general practitioner is justified in demanding a

larger fee in such cases. He frequently has to take his patient to a consulting physician or surgeon, and if an operation has to be performed he has to be present. It goes without saying that he should receive adequate compensation for such services, and it is unreasonable to expect him to spend his time in this way without remuneration. In spite of the increased cost of living, and the advances in medical and surgical science, the family practitioner is still receiving the same compensation as his predecessors of two or three generations ago. If the public will compensate the family physician fairly and promptly for his services, and insist that all transactions between the physician and the consultant be carried on with the full knowledge of the patient, the cause and the possibility of this evil will speedily disappear.

The committee also points out that the prospect of receiving a commission sometimes results in exaggeration of the necessity for operation, and thus leads to indiscriminate, reckless and useless surgery, performed in some instances by inefficiently trained and inexperienced surgeons. Although the general practitioner is assumed to recommend his patients to consult a competent surgeon, the possibility of receiving 50 per cent. of the fee may interfere with his discrimination.

It was suggested at the meeting of the Board of Regents of the University of New York, held on April 19th, 1911, that the Legislature be requested to consider the advisability of prohibiting the consulting physician or surgeon from paying fees to another practitioner without making known the fact of such payment to the patient or the relative or friend acting on his behalf; and also that it might be advisable for the Board of Regents to announce that it will revoke the licenses of physicians or surgeons determined to have been guilty of this practice.

Dr. A. S. Draper[12] is of opinion that correction of the evil must come from within the profession itself by means of the local organizations, and that if this is not done the public will probably take the matter into its own hands with painful results.

The Academy of Medicine, Toronto, appointed a committee to consider this question, and the following resolutions were passed at the annual meeting on May 7th, of this year:—

"1. That the payment of a commission to any person or persons who may be instrumental in influencing a patient or patients to apply for professional advice is wrong in principle and detrimental to the best interests of our profession.

"2. That when two or more practitioners are engaged in a case

the disposition of the respective fees shall only be made with the knowledge and consent of the patient.

"3. That we agree that the attending physician has often been inadequately paid for his services."

I would suggest that this matter be dealt with by this association at the present meeting, and that a similar action be taken to that of the Toronto Academy of Medicine.

Progress in Surgery.

The last two or three decades have been a period of marvellous development and evolution as regards surgery, and there is no question that the chief factors to which this evolution is due are the discoveries of the bacterial origin of disease, of antiseptics, and the more recent development of asepsis.

I should like here to refer to the great loss which the medical world has recently sustained in the death of that distinguished scientist, Lord Lister, which occurred at Walmer, England, on February 10th, of this year. Many of you will remember the pleasure we had in meeting that kindly and unassuming man at the meeting of the British Medical Association in Toronto, with his gentle face and wonderful personality. His great achievements in the domain of medicine and surgery are well known to every member of the profession, and to his practical application of the discoveries of Pasteur we owe the fact that it has now become possible to secure the kindly healing of wounds without the suppuration which to the older surgeons seemed a necessary part of healing, and which made any operative measure extremely dangerous. Even in the cases in which recovery did ultimately take place it was accompanied by such complications as erysipelas, hospital gangrene and pyemia, which can now be avoided in practically all cases.

Another factor which has contributed to the reduction in the mortality of surgical operations is that in the majority of cases the surgeon is now consulted at an earlier stage of the disease than formerly, when the risk attendant on many operations was so great that they were undertaken only as a last resource. We now recognize that in many cases delay entails considerably greater risk than immediate operation, and that prognosis is often more favorable if the latter is undertaken at the earliest possible moment.

The above remarks apply more especially to what may be termed acute abdominal emergencies. The degree of perfection to which asepsis has now been brought renders it possible to open with safety the cavities of the body, and to expose freely the area of

disease, thus enabling the surgeon to operate with greater confidence. The knowledge of surgical pathology thus acquired has resulted in a coincident development of methods of diagnosis, and we have learnt that peritonitis represents only a late result in very various diseases. It has also led to more intelligent after-treatment, and, instead of keeping the intestines at rest as long as possible after an abdominal operation, as was formerly the custom, the aim of the surgeon now is to obtain resumption of normal physiological and mechanical intestinal functions as soon as possible, and thereby to prevent the supervention of peritonitis.

Appendicitis.

I should like here to refer very briefly to the treatment of acute appendicitis. For many years this subject has been discussed freely in our medical societies, and different opinions held as to the proper time for operation, but at the present time surgeons throughout the world are practically unanimous in the view that the proper time to remove the appendix is immediately the diagnosis has been made.

I think it very desirable that the public should be educated to appreciate the fact that a diagnosis of acute appendicitis invariably calls for immediate operation; that no other form of treatment is of curative character, and that delay is dangerous. Of course all we can do in the matter is to strongly advise operation. We cannot compel a patient to submit to operation; but, in view of the great risk incurred by delay in such cases, it is most important that the public should be educated to appreciate the imperative necessity for immediate surgical treatment.

Blood Examination.

Within the last ten or twelve years much has been learnt in regard to the value of examination of the blood in acute surgical diseases, and it has been extensively employed as an aid in the diagnosis of obscure suppurations, and more especially in differential diagnosis. The results of experimental and clinical work indicate that investigation of the blood and, above all, determination of the percentage of polymorphonuclear leucocytes, although not in itself sufficient to definitely establish a diagnosis, may, when considered in relation to the clinical symptoms, be an important factor in the differentiation of various acute surgical diseases.

In addition to the value of blood examination in diagnosis, the presence of marked leucocytosis often indicates a hopeful prognosis,

but the most conclusive results are obtained, both in regard to diagnosis and prognosis, when the total and differential counts are taken together, and considered in relation to each other and the clinical findings. The total count may be regarded as an index of resistance of the body to the infective agent, whilst the differential count indicates the severity of the infection.

Intravenous Anesthesia.

Improvement in the methods of inducing anesthesia has been an important factor in advances in surgery, inasmuch as it now results in much less functional disturbance and interference with the manipulations of the surgeon. Instead of being obliged to rely upon one method only, as was formerly the case, we have now a choice of many methods of inducing anesthesia, and can select that which seems to be most suitable for the condition with which we are dealing.

In this connection I may refer to intra-spinal anesthesia, which has been practised extensively abroad, and to some extent also in this country. A few years ago Bier[13] described the technique of intravenous local anesthesia, which has been found particularly useful in cases with pulmonary and cardiac complications. Bier injects novocain into the circulation, and under this method of anesthesia has performed various operations on the limbs, including resection of the elbow, resection of the knee-joint, and amputation of the lower part of the leg. He thinks there is not the slightest doubt that it is suitable for amputations of all kinds. More recently a method of intravenous general anesthesia has been suggested by Burkhardt of Münich,[14] which appears to be free from the many objections to inhalation anesthesia, and I believe has a great future in store for it.

At the present moment the safest all-round anesthetic for general purposes is undoubtedly ether, given by the open method. I may say that for many years I have been in the habit of insisting upon the use of ether as an anesthetic, feeling that it is much safer than chloroform or chloroform in combination with ether. I would further like to emphasize the very great importance of having the ether administered by a skilled anesthetist.

Brain Surgery.

The most recent advance in the surgery of the brain consists in operations upon the hypophysis cerebri, which have been undertaken for the relief of acromegaly, and have in several cases resulted in retrogression of the symptoms.

The Rontgen Rays.

Röntgenology is now highly developed, and has become one of the most valuable adjuncts to surgical diagnosis. It has also greatly contributed to render surgery a more exact science, as it gives us a clearer understanding of the condition of many of the cases which come under our observation, and in many instances also gives indications for treatment.

In fractures the Röntgen rays are of the greatest possible service, as we are able to ascertain by means of a skiagram whether or not the fractured portions of bone are properly adjusted. It is also most useful in disease of the bones, as it is capable of showing the most minute alterations in structure.

Great advances have recently been made in Röntgenology, as applied to the diagnosis of disease of the alimentary canal, and it has greatly increased our knowledge of its physiology and pathology. In this region it is second only to an exploratory laparotomy, and by enabling the surgeon to make an early diagnosis renders it possible to operate at a much earlier and more favorable time. The radiographs are taken after the administration of bismuth subcarbonate, which obstructs the rays, and is considered the most suitable preparation.

By this method displacements of the stomach can be determined with a greater degree of accuracy than by any other means, with the exception of an exploratory laparotomy. The more recent methods of Röntgenology have rendered it possible to demonstrate the site of stenosis of the alimentary tract; to distinguish in some cases between functional and organic constriction; to observe the peristaltic action of drugs and the functioning of intestinal anastomoses; to determine the existence of visceroptoses and of diverticula. The X-rays have also been used in the diagnosis of pulmonary and other intra-thoracic conditions, and Rosenbaum[15] reports a case in which a diagnosis of miliary tuberculosis of the lungs was made, the skiagram showing numerous small tuberculous areas in both lungs.

Schurmayer[16] emphasizes the value of Röntgenopalpation of the abdominal viscera, which is practically manipulation of the organs under the guidance of the eye, and he considers it to be especially useful in the diagnosis of pathological fixation of organs.

Although an X-ray examination is of the greatest assistance in diagnosis, it should not supersede the older methods of accurate clinical investigation, but should be used in combination with them.

As a therapeutic agent, however, the X-ray has been very disappointing, and has frequently been attended with harmful results. It has been successful in the treatment of certain superficial forms of carcinoma, but in these cases a quicker and more satisfactory result would, as a rule, be obtained by the use of the knife.

Radium Treatment.

The exact value of radium in the treatment of disease is at present complicated by the question of expense, and it is, of course, possible that in cases in which small doses fail larger doses would be successful.

Dr. Louis Wickham,[17] who has had considerable experience with this mode of treatment at the Radium Institute at Paris, has recently reported his results. He is of opinion that in the case of malignant growths, which are difficult to remove, intense application of radium previous to operation is beneficial, and may facilitate removal of the growth.

It is sometimes useful in the treatment of superficial lesions, such as rodent ulcer and epithelioma, but I have recently seen a case of superficial epithelioma in which it was positively injurious, and, after six months' treatment, it was necessary to remove the growth by operation. I have also seen cases of rodent ulcer which were in no way benefited by radium treatment, and required subsequent surgical removal.

It is of undoubted value in the treatment of certain vascular lesions, such as nævi, port wine stain, etc. Wickham considers it also of value in surgical tuberculosis and other skin lesions.

My feeling about it in malignant disease is that it should never be used where an operation is possible; but, after the growth has been removed, there can be no objection to its use for a time, in the hope that it may prevent recurrence.

That it should be used as a cure for cancer is an unfortunate mistake, and has brought radium into disrepute in many quarters. It is a great pity that the opinion has got about that radium will cure cancer, or that anyone should employ radium for a treatment of malignant disease where surgery is possible. I have met with a number of instances in which a great deal of valuable time has been wasted in the use of radium, the delay meaning that the growth was becoming inoperable.

In addition to the therapeutic use of radium, small doses of it have been found to stimulate the healing of wounds.

Thoracic Surgery.

In 1908 Sauerbruch devised a cabinet which rendered it possible to open the thorax freely, whilst respiration was kept up under the influence of either positive or negative pressure. This led to great advances in thoracic surgery, and many intrathoracic conditions can now be dealt with in a way that was impossible a few years ago. Dr. Willy Meyer[18] subsequently constructed a cabinet which was an improvement on Sauerbruch's apparatus, in that pressure could be changed from positive to negative at the will of the operator, or both kinds of pressure could be used simultaneously. He describes this cabinet as the "universal pressure chamber."

In 1909 Meltzer and Auer[19] suggested a new method of artificial respiration under positive pressure, which they called intracheal insufflation, and the very satisfactory results in curarised dogs led to its employment for intrathoracic operations in man. Subsequent experience has shown that in the Meltzer-Auer method we have a simple and apparently safe method of producing intra-pulmonary pressure, permitting of open operations upon the pleura and other intrathoracic structures without the use of any cumbersome apparatus, and that, owing to these advantages, it is likely to supersede all the more complicated pressure cabinets.

Dr. Elsberg[20] has anesthetized about two hundred patients in this way at the Mount Sinai Hospital, New York, and states that the results are extremely satisfactory. The operations in which he has employed it include craniotomy, thyroidectomy, thoracic empyema, removal of tuberculous cervical glands, pulmonary operations, etc.

Operations upon the heart represent a comparatively new field of surgery, although an attempt was made by Farina in 1896[21] to suture a wound of the heart. In 1909 Vaughan[22] collected 159 cases of suture of the heart, with 35 per cent. cures. Eugene H. Pool[23] collected 77 cases, operated upon between 1909 and 1911, with 55 per cent. recoveries and 45 per cent. deaths. The use of differential pressure methods has greatly improved the prognosis in these cases, and recent literature on the subject indicates that the heart can be manipulated and treated surgically in the same way as any other organ in the body.

Amongst the most important contributions to the surgery of the heart and blood-vessels is the work of Professor Carrell, which was commenced in 1902 at the University of Lyons, France; continued at Chicago, and more recently carried on at the Rockefeller Institute, New York. He uses the Meltzer-Auer method of insufflation anesthesia, and, as you will hear from his lecture this evening,

has been able to perform successfully circular suture of arteries or veins, arterio-venous anastomosis, transplantation of segments of veins into arteries, patching of arteries with pieces taken either from veins or the peritoneum, the reversal of circulation in the thyroid, transplantation of the kidney from one side to the other in the same animal or to another animal of the same species, and more recently the transplantation of entire limbs. The results of his experimental researches indicate that we may in future be able to cure many diseases of the heart and blood-vessels by means of surgical procedures.

Förster's Operation.

Surgery has again come to the relief of what has hitherto been regarded as a purely medical condition, namely, tabes dorsalis, and resection of the posterior spinal roots has been performed for the relief of the gastric crises met with in this disease.

The *rationale* of the operation is based on the assumption that in the various crises which occur in the course of locomotor ataxia, affecting the stomach, intestines, bladder or larynx, there are invariably three cardinal signs, namely, symptoms of motor, sensory and secretory irritation of the organ involved. In Förster's opinion sensory irritation is the primary condition, the other two being secondary. Förster and Küttner[24] operated on a patient suffering from tabes, the seventh to the tenth thoracic roots inclusive being divided. Pain and vomiting subsided, the appetite improved, and the patient gained in weight.

It has also been recommended for the spasticity which obtains in cerebral diplegia, and which is due to loss of inhibition from the higher centres, but far better results have been obtained in the lower than in the higher extremity. The immediate results are great diminution in or disappearance of the spasticity, and of spontaneous contractures and cramp, if present.

Osteoplastic Surgery.

During the last few years osteoplastic and cosmetic surgery has undergone remarkable development, and bone transplantation has recently been extensively employed in the correction of congenital defects and in replacement of bone which has been destroyed or removed by injuries or destructive diseases of various kinds.

Some surgeons, including Lexer, Enderlen and Königsberg, have successfully transplanted entire joints. Lexer[25] reports four functionally successful cases, in which portions of bone and adjacent joints were replaced by bone and cartilage. In two cases of

synostosis of the knee, due respectively to suppuration and tuberculosis, the entire knee was resected, and a new knee-joint, with a portion of the shaft of the tibia, implanted. These patients, four and seven months after the operation, experienced no pain on standing or walking, and could use the knee to a slight extent, passive movement to an angle of 45 degrees being possible in one case. Lexer usually procures his material from limbs amputated for senile gangrene.

In a more recent publication Lexer[26] reports several cases in which he has transplanted bone for cosmetic purposes, including formation of a nose or ear, correction of defects after operation for cancer of the face, transplantation of a portion of the scalp to supply a moustache or beard, and of a wedge of bone from the tibia to form a frame for the nose.

Kirschner[27] has had excellent results from transplantation of fascia from the iliotibial band of the fascia lata. He has used it chiefly to wrap around vessels or organs after suture, to close defects and reinforce hernia operations, to interpose between organs which have grown together, to make a sling for suspension of a displaced kidney or other organ, and for closing gaps in the dura. He also thinks it suitable for a substitute for tendons.

In the treatment of paralytic deformities of the extremities bone transplantation has been largely superseded by periosteal implantation of normal tendons, which is based upon the fact that normal muscle tendons will continue to functionate normally, even if the muscles pull in an altered direction. Lange of Münich arrived at the conclusion that it is inadvisable to impair and possibly sacrifice normally functioning tendons when the result is problematical, and therefore devised the method of implantation of silk, the results of which are the best that have been attained up to the present.

Alcohol Injections in Trigeminal Neuralgia.

From time to time many experiments have been made with the object of relieving the pain of trigeminal neuralgia and preventing its recurrence, these experiments consisting chiefly of the injection of chemical solutions and fluids of various kinds into or around the affected nerves. The procedure which has, up to the present, had the most satisfactory results is that of deep injections of a solution of alcohol into the trunk or trunks of the nerves involved. If the injection is skilfully performed, and the needle punctures the nerve sheath, the alcohol instantly paralyzes the nerve at the point of injection, and destroys the fibres. Resection of the Gasserian

ganglion, which is an exceedingly severe operation, is, however, the only effectual means of obtaining a permanent cure, but the alcohol injections may relieve the pain for a period of from six months to two or three years, and the great advantage of the procedure is the possibility of repeating the injections indefinitely at short intervals if the pain returns.

Ehrlich's Salvarsan.

The last three or four decades have been a period of extraordinary development in regard to the science of applied bacteriology, and more especially with reference to its value in the diagnosis and prognosis of infective diseases.

Syphilis is one of the diseases to which attention has been directed in this connection, and the recent advances in its treatment date from the researches of Professor Metchnikoff, who in 1903 succeeded in transmitting the disease to apes by inoculation, and thus proved that it was due to a specific infection. Further investigation along these lines led to the discovery in 1905 of the spirochete pallida as the infective agent, and to that of the Wassermann serum reaction in 1906.

Early in 1910 Ehrlich[28] made the assertion that the chemical compound dioxy-diamino-arseno-benzol, to which he gave the name of "606," is capable of producing "sterilization of the system." After making a large number of experiments in animals, Ehrlich sent samples of the drug to physicians in different parts of the world, in order that they might make a trial of its efficacy in the treatment of human syphilis. The immediate results were brilliant, but the intramuscular injections, which were at first used, had the great drawback of causing extreme pain and disability, and this method has been discarded.

Since that time the preparation has been greatly improved, chiefly in the direction of solubility, and it has successively become "606 ideal," "606 hyperideal," and, lastly, "Salvarsan."

Ehrlich subsequently recommended that the drug should be administered intravenously in small doses, and in some cases in combination with mercury. Many writers, including Sir Malcolm Morris,[29] employ this combined form of treatment, and are of opinion that until time has shown that the effects of salvarsan are permanent this is the more prudent course.

Although Ehrlich's idea that the drug would be capable of destroying every spirochete in the body has not been completely realized, and although it is no longer considered to be an infallible specific which is indicated in every case of syphilis, there is no

doubt that it is the most powerful antisyphilitic remedy which we possess at the present time. It was at first feared that the administration of salvarsan might result in injury to the optic nerve, but Ehrlich states that he has not heard of a single case of blindness in connection with it, and Wechselmann, who has used it in over 1,200 cases, has not observed injury to the nerve in any one of them.

Etiology and Treatment of Cancer.

During the last few years extensive investigations have been undertaken by various scientists, including those carried out by the Cancer Research Commission in London, England, and at the Rockefeller Institute, New York, but up to the present no definite conclusion has been arrived at with regard to the etiology of cancer.

In this connection I should like to refer to the very valuable work in regard to cancer, which has recently been done by Sir Henry Butlin, the great surgeon and pathologist, who died at London, England, on February 24th, of this year. He had devoted special attention to diseases of the throat and tongue, and, strange to say, he died of cancer affecting the larynx.

At the last annual meeting of the Cancer Research Commission, held in London in July of last year[30], the Secretary, Dr. Bashford, stated that it has now been proved beyond the possibility of doubt that cancer, to begin with, is a local, and not a constitutional, disease. This fact contributes to render prognosis comparatively favorable, provided operation can be undertaken at an early stage, whilst the disease remains circumscribed. Precise evidence has also been secured in regard to the existence of hereditary predisposition to spontaneous cancer. Its wide distribution throughout the entire human race and the vertebrates, even when living in a state of nature, and the fact that the only way in which it can be transmitted from one individual to another of the same species is by the implantation of living cancer, proves, according to Dr. Bashford, that it is not due to a common causal parasite. The almost invariable success of reimplantation into an animal of a portion of its own spontaneous tumor, and the almost invariable failure of implantation of any spontaneous tumor into other spontaneously affected animals, lead him to the conclusion that each tumor is individual, and genetically related to the particular organism in which it originates.[31]

In his Hunterian Lectures, delivered at the Royal College of Surgeons, London, England, about a year ago, the late Sir Henry Butlin[32] brought forward a theory of the intrinsic, as opposed to

the extrinsic, origin of cancer. According to this theory, each cell in the human body is regarded as equivalent to an entire individual amongst the protozoa or other unicellular organisms, and the cancer parasite is taken to be in effect simply the cancer cell, which by a process of atavism has reverted more or less to the condition of the original protozoa, and has become in its relation to the normal cells in the body the equivalent of an intruding protozoan parasite. This cancer cell, to which he gives the name of *unicellula cancri*, is considered to be a completely independent organism, which has not entered the body from without, but has been generated within it, and which, instead of acting in harmony with the normal cells, acts in opposition to them, and thus produces anarchy and destruction.

Two objections have been made to this view, namely, that in the first place the cancer cell, so far as we know, undergoes no process analgous to that of fertilization, and that, in the second place, it is apparently incapable of growth apart from the organism in which it has primarily developed.

As regards the second of these objections, Dr. Peyton Rous, of the Rockefeller Institute, New York,[33] has produced malignant sarcoma in fowls by the subcutaneous injection of the filtrate of a similar growth obtained from a bird of the same species. Professor Alexis Carrel and Dr. Burrows, also of the Rockefeller Institute, report a still more conclusive experiment, in so far as the human subject is concerned, in that they have made a successful culture from a sarcoma removed by operation from a female patient, although in this instance growth was less luxuriant than that of the fowl sarcoma.

In this connection it may be mentioned that Dr. Simon Flexner[34] draws attention to the fact that it has recently been discovered that a number of diseases occurring in man and the higher animals are due to microscopic parasites, epidemic poliomyelitis being an instance of this.

Sir Jonathan Hutchinson[35] states that his experience indicates that the administration of arsenic, even if only for a short period, may result in predisposition to cancer, more especially epithelioma, and he thinks that it is probably also responsible for some cases of endothelioma and sarcoma. He suggests that the drug may act as a depressant to growth, and thus allow of the appearance, after a short interval, of degenerate forms of growth nearly allied to those of vegetation.

From time to time a large number of remedies have been suggested for the treatment of cancer, and some of them have been used with a certain amount of success. Several writers report cases

in which they have employed serum prepared from cancerous material. Berkeley and Beebe[36] find that autogenous is more effective than stock serum, and think that this mode of treatment may be serviceable in the prevention of recurrence of malignant tumors after operation.

Dr. Coley, of New York,[37] claims to have cured a few cases of sarcoma of the femur by injection of the fluid which bears his name. Sir Henry Butlin states that the Continental and English surgeons have not been equally successful in the use of this fluid; and, although we have used Coley's fluid here a number of times, we have never seen a case in which it has been of value.

Acting upon the suggestion of Professor Ehrlich that the cancer cell might possibly be influenced by a specific drug, Wassermann and others[38] have found that a compound of eosin and selenium, injected intravenously into mice infected with malignant tumors, causes marked softening of the tumor after three injections; after four injections absorption of its liquefied contents, and in favorable cases its complete disappearance in about ten days. In the case of exceptionally large tumors, which tend to soften rapidly, the animals frequently succumb to the action of the toxic material absorbed from the tumors. Autopsy indicates that the preparation has been deposited electively in the tumor, indicating its affinity for the cancer cells. It apparently has a destructive action upon the nuclei of these cells, whilst it does not affect the normal cells. In animals which have been kept under observation for months after disappearance of the tumors no recurrence has been noted, but if a tumor is only partially destroyed recurrence is rapid.

In the report of the Cancer Research Commission, previously referred to, Dr. Bashford emphasizes the fact that nothing but harm can arise from the premature application to the treatment of human cancer of methods which have been found effective in modifying inoculation cancer in animals. A method which produced active immunity in inoculated cancer was tested in thirty-three mice with natural cancer. It resulted in no arrest of growth or dissemination, and did not prevent recurrence of spontaneous cancer after operation.

During the last thirty years or so there has been marvellous improvement in the results of operations for cancer, and extensive and early operation, with removal, as far as possible, of all the cancer cells in the body, has been attended with great success. In view of the fact that most of the writers on the subject agree in considering individual resistance an important factor, if not the chief factor, in the cure of cancer, it is obvious that even when the

disease is sufficiently advanced to be no longer localized, and cancer cells have already migrated, it is highly desirable to remove the chief source of supply of these cancer cells, and thus assist the defences of the organism in their endeavors to re-establish normal physiological conditions.

Bibliography.

1. Editorial, *Journ. Amer. Med. Assoc.* 1910, LIV, 1949.
2. Welch, W., *Journ. Amer. Med. Assoc.* 1910, LIV, 2011.
3. Colwell, Dr., *Journ. Amer. Med. Assoc.* 1912, LVIII, 654.
4. Osler, Sir W., *Journ. Amer. Assoc.* 1912, LVIII, 654.
5. Carnegie Report, "Medical Education in the United States and Canada." 1910, 163.
6. Editorial, *Journ. Amer. Med. Assoc.* 1912, LVIII, 134.
7. Owen Bill, *New York Med. Journ.*, April 20, 1912, 810; and *Journ. Amer. Med. Assoc.* April 20, 1912, 1221.
8. Smoot Bill, *Journ. Amer. Med. Assoc.* 1912, LVIII, 1034.
9. Editorial, *New York Med. Journ.* Jan. 3, 1912.
10. Lord, J. F., *Journ. Amer. Med. Assoc.* 1911, LVI, 725.
11. Report, Erie County Med. Soc. (State of New York), *Journ. Amer. Med. Assoc.* 1911, LVI, 59.
12. Draper, A. S., *Journ. Amer. Med. Assoc.* 1912, LVIII, 582.
13. Bier, A., *Arch. f. klin. Chir.* 1908, LXXXVI, No. 4.
14. Burkhardt, *Münch. Med. Wochens.* Nov. 16, 1909.
15. Rosenbaum, *New York Med. Journ.* 1911, 1183.
16. Schurmayer, *Med. Klin.* 1910, No. 26, p. 1017.
17. Wickham, Louis, "Radium Therapie." Paris, 1912.
18. Meyer, W., *Journ. Amer. Med. Assoc.* 1909, 1878.
19. Meltzer and Auer, *Journ. Experim. Med.* 1909, IX, 622.
20. Elsberg, C., *Annals of Surgery.* 1911, LIII, 749.
21. Farina (cited by W. Thorburn, *Brit. Med. Journ.*, 1910, II, 1029).
22. Vaughan (cited by W. Thorburn, Ibid).
23. Pool, Eugene H., *Annals of Surgery.* April, 1912, 488.
24. Förster, *Journ. Nervous and Mental Diseases.* Sept., 1911, 293.
25. Lexer, Ehrlich, *Arch. f. klin. Chir.* 1908, LXXXVI, 939.
26. Lexer, Ehrlich, *Arch. f. klin. Chir.* 1910, XCII.
27. Kirschner, *Therapeutische Monatshefte*, Berlin. Dec., 1911.
28. Ehrlich and Hata, "Die experimentelle Chemotherapie der Spirillosen."

29. Morris, Sir M., *Brit. Med. Journ.* 1912, I, 712.

30. Bashford, *Brit. Med. Journ.* 1911, II, 171.

31. Bashford, *Brit. Med. Journ.* 1911, II, 1307.

32. Butlin, Sir Henry, *Brit. Med. Journ.* 1911, II, 1393 and 1457; and 1912, I, 953.

33. Carrell and Burrows, *Journ. Amer. Med. Assoc.* 1910, LV, 1554.

34. Flexner, Simon (cited by Morton, *New York Med. Journ.* March 30, 1912).

35. Hutchinson, Sir J., *Brit. Med. Journ.* 1911, I, 976.

36. Berkeley and Beebe, *Med. Record*, New York. March 16, 1912.

37. Coley (cited by H. T. Butlin, *Brit. Med. Journ.* 1911, II, 1457).

38. Wassermann, *Journ. Amer. Med. Assoc.* 1912, 127.

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And Ontario Medical Journal

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COMMENT FROM MONTH TO MONTH.

The Annual Meeting of the Ontario Medical Association, held in Toronto, May 21st to 23rd, was one of the best, if not the best, in a dozen years.

Dr. Herbert A. Bruce made an admirable presiding officer, was at all times attentive to his duties, courteous, solicitous for the enjoyment of the members of the Association, had a keen edge on his authority as chairman, clear-cut, incisive in his presidential address, as well as happy as host at the various functions.

The outstanding features of the meeting were the President's address, the most interesting address in surgery by Dr. Crile, the epoch-making demonstration by Dr. Caller, the admirable paper by Dr. Turner, read by Dr. Fotheringham, and the annual banquet.

Without the shadow of a doubt, the character of the speeches at the banquet on the evening of the second day were by far the best heard in a long time at any medical banquet; and the address of Ven. Archdeacon Cody was one which will not soon be forgotten. A polished, graceful and forcible speaker, it was said by those who knew that the Rev. Archdeacon surpassed himself.

Amongst others who contributed to the success of this evening were President Falconer, Mr. Justice Riddell, Hon. Adam Beck, Dr. M. M. Seymour, Regina; Dr. H. G. McKid, Calgary, President

of the Canadian Medical Association; the Superintendent of the Toronto General Hospital, Drs. Bingham and Fotheringham. The speeches were of a high order of excellence, and this function alone would have amply repaid anyone for his attendance.

Two mild ructions occurred at the meeting. One was over the so-called "fee-splitting" business; the other over the so-called "wanton" destruction of cultures, pathological specimens, etc., at the laboratories at Gravenhurst.

Of the former nothing definite was done except to place the matter in the hands of a special committee to report a year hence. The discussion brought out the fact that there is no inconsiderable unrest over the present financial arrangements as regards the general practitioner and operator. The sentiment seemed to be unanimous that "fee-splitting" was dishonorable *per se*. If so, we submit, it is something for the Medical Council to deal with, as not through the medium of the Ontario Medical Association can anything be done to offset it. As it is a question which affects the entire profession of the province, it thus comes within the purview of the Medical Council, as it cannot possibly be rightly nor correctly adjudged by any local association in which the membership is voluntary. It would seem to be no good for the one thousand or more members of the Ontario Medical Association to condemn it and ostracize their guilty associates, when two thousand practitioners beyond the pale of the Ontario Medical Association could hew wood and draw water as they wished.

The "wanton" destruction of specimens, the result of painstaking research work, wherever it takes place is to be thoroughly condemned; and the medical profession in Canada is entitled to know the whole truth of this matter and to have both sides of the story. Acts of vandalism can never be condoned. Accidents, we know, may occur in the best of regulated households; and the profession will read with intense interest the presentment of the parties thereto.

The suggestion of the President to round out affiliation with the Canadian Medical Association by the organization of district associations has often before been advocated in these pages, and it is a scheme which meets with our hearty endorsation. We are not in a position to say just how many or what provincial associations are properly affiliated with the national medical body, nor what provinces have county or district medical associations in close touch with the provincial associations. This was the purport of the reorganization scheme of the Canadian Medical Association some years ago, but it looks as though there had been tardiness in the

completion of the reorganization and that there still existed a belief that "half a loaf was better than no bread."

The trade in patent and proprietary medicines is to be investigated by a select committee in Great Britain under the chairmanship of Sir Henry Norman.

This committee is the result of generations of protest on the part of the medical profession of the United Kingdom, and will be sure to bring more prominently before the eyes of the public the many dangers incident to the promiscuous and indiscriminate drugging with "patent medicines."

It is quite certain that an exhaustive examination of the whole question will be made, and that it will be conducted with the sole object in view of the public good.

The Canadian Medical Association might well interest itself in promoting a similar committee for the Dominion of Canada.

Summer tourists would do well to consult their family physicians or at best the health officer of the district into which they are going before deciding definitely upon their summer retreat.

The anticipation of a summer holiday is sometimes as replete in happiness as the full fruition of it, but often the happiness is cut short by a hasty return to the city and some weeks of sick-bed or hospital life through an ill-advised selection of the holiday resort.

Particularly is this the case where typhoid fever has been contracted; and it is of first importance to the holiday seeker after rest and recreation that he should satisfy himself that there is no chance of being contaminated by this disease in any community in which the sojourner elects to stay for a period.

People should be satisfied as to the quality of the water they are going to drink, the source and handling of the milk supply, location and sanitary conditions of privies, drainage, and that screens are employed towards protection and comfort from flies, insects, mosquitoes, etc.

The question of the sanitary environment of the summer resort in which one is going to spend three or four weeks or a couple of months does not often enter into the plans and deliberations of the summer tourist, but it will always be found a wise and safe procedure to consider at least whether typhoid has or has not made its appearance.

Church, law and medicine must act in unison, said Venerable Archdeacon Cody, in his address at the Ontario Medical Association banquet, in building up a fine nationhood for Canada.

Someone has said eugenics and modern civilization are incompatible. This forces the necessity for co-operation of the learned professions.

We must look to the legal profession in framing wise and judicious legislation, to the medical profession to determine the physically and mentally normal, and to the clerical profession to abstain from binding in the holy bonds of matrimony the physically, mentally and morally unfit.

Under the administration of the present Government of this Province of Ontario health matters, hospital expansion and administration, prison reform, stand in an advanced position. A decided step forward will be taken when, as we have advocated before, the issuing of marriage licenses is placed in the hands of properly qualified medical men.

There is at least one church in the United States whose clergy will hereafter require certificates from reputable physicians that the contracting parties are physically and mentally normal before solemnizing the marriage ceremony. It were well if all marriages were consummated by the clergy and that such were the basis of all marriage contracts.

The Ontario Medical Association might well take up with the Government the question of making medical men the issuers of marriage licenses, and the clergy that they, alone, perform the marriage ceremony.

The National Insurance scheme of Mr. Lloyd George has now been before the English public for one year, yet success for the measure is not in sight..

That the medical profession is not treated fairly by this measure there are many evidences other than those set forth in the medical press.

The new move by the profession, designed to bring Mr. Lloyd George to his senses, is for the doctors to cut off all their contract relations with friendly societies. This step has been forced upon the profession by the Chancellor of the Exchequer, who for the past twelve months has not ceased in every way to bring the medical profession in line with the proposals of his bill.

It seems that the profession mistrust the insurance committees of the friendly societies, for on these committees the doctors will

be in the minority, and they mistrust the undiluted societies still more.

The British Medical Association, through its State Sickness Insurance Committee, is now pledging members to resign from club and lodge practice and not to accept appointments under this Act. They are taking this step to offset Mr. Lloyd George, who has practically used all sorts of threats, as well as flattery and invective, to bring the medical profession to his feet, and thus to the feet of the friendly societies.

This, of course, is very serious business. It is practically the employment of the trade union boycott, and is forced upon the profession by a man who will go the whole length in seeing his ends accomplished.

This bill degrades the honorable status of the medical profession, does away with the independent medical man in part, and makes many the mere hired employe of the State.

The Bill and the trouble therewith directs attention to the evils of lodge practice more than anything occurring in the last quarter of a century.

CANADIAN MEDICAL ASSOCIATION.

The forty-fifth annual meeting of the Canadian Medical Association will be held at Edmonton August 10th to 14th. It is expected that the first day, being Saturday, will be devoted to business. The scientific part of the programme will begin on Monday and occupy the three days, Monday, Tuesday and Wednesday. At the conclusion of the meeting the G. T. P. offers an excursion to the famous Yellow Head Pass.

While it was at first thought that one day of the meeting should be spent in Calgary, that idea has been abandoned. A visit to Calgary may precede or follow the meeting in Edmonton. Everything goes to show that a splendid programme of papers will be ready, and the proverbial hospitality of the West is shown in the numerous arrangements already made for the amusement and the comfort of the visiting members.

As to railway rates, the standard convention certificate plan will be in force from all points in Canada, that is, the rate will be single fare plus 25c. for the return trip. Members are urged to ask from their local station agent for the standard convention certificate, which will be honored for ticket for return trip. It is neces-

sary that a certain number of certificates be secured before the rate can be valid. It would be wise also to secure sleeping car reservations early.

Those members who desire to go on to the coast, or return by one of the United States routes, can secure summer tourist rates which are very low.

The meeting in Edmonton offers an excellent opportunity to men in the East of seeing the West economically and at one of the most favorable times of the year.

XVII. INTERNATIONAL CONGRESS OF MEDICINE.

The second official circular of the Seventeenth International Medical Congress to be held in London, England, August 6th to 12th, 1913, has recently been issued.

The Address in Medicine is by Professor Chauffard, the Address in Surgery by Prof. Harvey Cushing, while Prof. Paul Ehrlich is to deliver the Address in Pathology.

The circular contains the Provisional Programme of subjects for discussion in the 23 sections constituting the Congress.

It is hoped that the profession in Canada will take full advantage of an event of such great importance in the medical world in particular, as the profession in Canada has been accorded such recognition by the British authorities in charge of the Congress.

Dr. W. H. B. Aikins, who is Secretary of the Canadian Committee, will be pleased to send these circulars or furnish other information to anyone interested. The Secretary's address is 134 Bloor St. West, Toronto.

News Items

Dr. J. M. Lane, Mallorytown, Ont., died on the 9th of June.

Dr. A. H. Caulfield has resigned as pathologist at the Sanatorium at Gravenhurst.

Dr. Colin Campbell, Toronto, is on a motor trip through England and Germany.

Dr. Chas. McGillivray, Whitby, Ont., has been elected President of the Ontario Medical Association.

The Hon. Adam Beck has been elected President of the Canadian Association for the Prevention of Tuberculosis.

Dr. Fred. Parker, Milverton, Ont., has gone on a two months' trip to Western Canada and the Western States.

Drs. W. J. Wilson and W. A. Young, Toronto, have returned from the meeting of the American Medical Association at Atlantic City.

Drs. Simpson, Halpenny and Gorrell, Winnipeg, Man., announce that May 15th new offices will be occupied in the new Sterling Bank Building, corner Portage and Smith Street. The number of the office phone will still be Main 272.

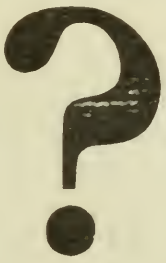
The following have been appointed District Medical Health Officers: Dr. D. B. Bentley, Sarnia, headquarters at London; Dr. T. J. McNally, Owen Sound, at Palmerston; Dr. D. A. McClenahan, Waterdown, at Hamilton; Dr. Paul J. Moloney, Cornwall, at Kingston; Dr. R. E. Wodehouse, Fort William, at Fort William; North Bay to be appointed.

Publishers' Department

The Massage Institution at 20 Walmer Road, Toronto, just north of Bloor Street, established only a few months ago, and conducted and supervised by Mrs. MacKinnon, is now one of the established medical institutions of Toronto. All branches of massage are carefully administered, Mrs. MacKinnon having had considerable experience in the Home Country. There are also electrical, electric light and needle spray baths; and the appointments and surroundings are all that could be desired. Male patients are attended by a masseur of practical experience. In every way, Mrs. MacKinnon attends to the comfort and best requirements of all patients. Physicians are invited to visit and inspect the institution.

Physicians desiring to secure a location for practice in Ontario, Manitoba, Saskatchewan, Alberta or British Columbia, can secure a list of from 25 to 35 openings in these Provinces, some with and some without property, by applying to Dr. Hamill, who conducts the Canadian Medical Exchange, 75 Yonge Street, Toronto, for the purchase and sale of medical practices and property. Bona fide prospective buyers can get particulars free of any offer simply by applying therefor and agreeing in writing that all information received is confidential and that they will not offer opposition for a reasonable time to any physician whose offer is submitted to them. A partial list of such practices for sale will be found among our advertising columns each month, the completion of which naturally changes with each issue.

Prepare the Babies for Hot Weather.—During the month of June it is not a bad plan for the physician to take mental "stock" of the babies under his care, especially such as are bottle-fed, with the general idea of recommending such treatment as will tone up and vitalize those whose nutrition may be below par, so that they may enter the trying summer months in the best possible condition to ward off or withstand the depressing influences of extreme heat or the prostrating effects of the diarrheal disorders of the heated term. Careful attention to feeding is, of course, a *sine qua non*, and the details of the infant's nourishment should be carefully investigated and regulated. But this is not all. Many bottle-fed babies



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are below standard from a hematologic standpoint. The marasmic anemic baby deserves special attention in the way of building up and restoring a circulating fluid which is deficient in red cells and hemoglobin. In the entire Materia Medica there can be found no direct hematic quite as suitable for infants and younger children as Pepto-Mangan (Gude). In addition to its distinctly pleasant taste, this hemic tonic is entirely devoid of irritant properties and never disturbs the digestion of the most feeble infant. Being free from astringent action, it does not induce constipation. A few weeks' treatment with appropriate doses of Pepto-Mangan very frequently establishes sufficient resisting power to enable the baby to pass through the hot summer without serious trouble, gastro-intestinal or otherwise.

After More Records.—The prize list of the Canadian National Exhibition, Toronto, August 24th to September 9th, has been issued. It shows the usual liberal prizes in all departments of live stock, agriculture and home work, amounting to a total of $55,000. It is also evident that the list has been carefully revised to have it in keeping with up-to-date conditions. A few of the innovations that might be noticed are provision for competition in breeding horses for strings of five horses; a number of sections added to provide for the newer breeds of poultry; $100 in prizes for onions, tomatoes and celery in baskets. The last named is a government suggestion meant to encourage export of these commodities. On the whole, the list shows a distinct advance on its predecessors, and, as the attractions will include a review of cadets from all the overseas dominions of the Empire, the Scots Guards Band and a brilliant historical spectacle, the Siege of Delhi, it is safe to predict another record year for the Canadian National.

Every physician knows that Modified Milk is the best infant food. But what about the method by which it is modified? The usual way is to cut down the casein content by dilution with water, to restore the ash by the addition of lime water, and then to add cream and commercial milk sugar. But this dilution, while it decreases the too-abundant casein of cows' milk, further decreases the already insufficient and equally important milk albumen. Also lime water is only a makeshift to restore part of the natural salts in the ash, and commercial milk sugar lacks the properties of the unrefined lactose present in fresh milk.

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How the Men on the Prison Farm Spend Their Day.—There are no bolts or bars on the Hon. W. J. Hanna's Prison Farm, at Guelph, says Robson Black, writing in November *Canada Monthly* under the title of "Making a Man of a Convict." On the day I visited at the farm, one man was assigned to work on a new concrete bridge over the River Speed, built entirely by the prisoners and much admired by Earl Grey and the Duke of Connaught on their visit. He applied himself with diligence and intelligence to his new duty. His surroundings were practically identical with those of the freest man in Canada. A "foreman" instructed him in the mixing of concrete and the manipulation of tools. It was perspiring, back-bending work, but conducted with the camaraderie that helps the hours pass like lightning. Twelve o'clock brought the signal for luncheon. The men formed in line and marched off to the dining hall, where they feasted as well as the best fed farm-laborer in the land. Then a group of four, unattended, shouldered their axes and struck off for a patch of woods half a mile distant, where post cutting was in progress. Five others found a new assignment in straightening out a bend in the river regarded as unconducive to the esthetic standards of the farm. Many were needed for the quarry and a corporal's guard manned the lime kiln. A good-tempered fraternity departed for some newly-planned highway. The fine Holstein herds required attention. The dairy took a foreman and five. Two were sent with horse and wagon to repair some broken fencing, and gave a lift to a comrade bound for town to replace a piece of damaged machinery. Such a disposition of two hundred men would read in the annals of twenty-five years ago as the order of a public maniac. Were the Provincial Secretary of Ontario inclined to boast, he might very easily offer a substantial reward for the duplication in any old-fashioned prison of such occurrences as I am about to relate. A man of thirty years, whose residence in his native town had been a source of police worry, fastening upon himself the distinction of a professional loafer, took an extra liberty with the law and was awarded a two-month sentence. The officer in charge of the Prison Farm gave him a special job, beautifying a portion of the river bank. Though at first mulish, he quickly evinced a curious pride in his undertaking and when compelled to relinquish it by the expiration of his term was far from jubilant to regain his liberty. Spying Mr. Hanna coming along a path, he accosted him thus: "I hope you'll see that a good man is placed on this river job. It has been a tough piece of work, sir, and I wouldn't like to hear of it being spoiled." It was probably the first confes-

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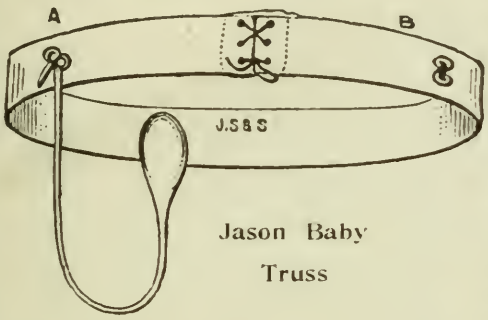

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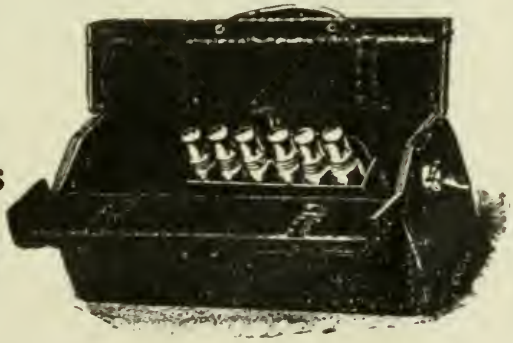

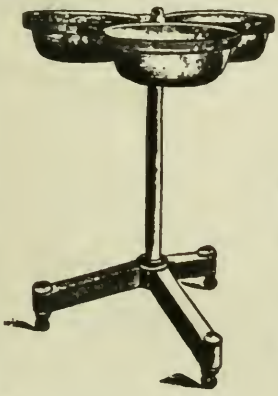

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sion of any interest or ambition that the poor fellow had ever made. The Minister gave him a ready assurance, for to his keen divination the incident was crammed full of significance.

Aphasia and Agraphia.—Two cases of motor aphasia and agraphia, illustrating the types that are suitable for surgical or specific treatment, are reported by E. Martin and C. K. Mills, Philadelphia (*Journal A. M. A.*, October 26), who also discuss the questions of localization of brain lesions both in these conditions and other varieties of aphasic disturbance. The article is lengthy and quite fully illustrated. They say that it is no longer sufficient to give the surgeon indefinite directions. He should find the lesion located by his neurologic confrère occupying the central portion of the area exposed. Aphasia and agraphia are not infrequently the focal symptoms dominating the clinical picture in which operation is under discussion, and the symptoms differ so much in character and degree and in their symptomatic associations that it is possible to designate at least four or five areas for election for osteoplastic operations, and four of these are considered in the paper. The symptoms which are most characteristic as indicating each of these are detailed as well as the methods of bounding the areas on the external surface of the cranium. It is important both to the neurologist and to the surgeon to consider whether or not the focal disease of the brain is syphilitic and amenable to constitutional rather than surgical measures. In one of the cases reported the presence of positive Wassermann and Noguchi reactions, together with the other symptoms, decided the question against operation, while the other was diagnosed in the absence of such a positive result as non-specific, and in both cases the diagnosis was correct, as shown by the final result. Together with general remarks on craniometric measurements, the limits of the osteoplastic operation for lesions in Wernicke's zone and for lesions in the angulo-occipital region are also given in detail, as well as of those causing motor aphasia. For these details the reader is referred to the article itself. In certain aphasic and agraphic cases in which the lesion is deep-seated, operation is clearly contraindicated. The characteristic symptoms in such cases are, briefly stated, the completeness of the accompanying hemiplegia, together with such phenomena as indicate evident involvement of the capsules, internal and external, the claustrum and the basal ganglia.

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Bovril aids the digestion and assimilation of food. See *The British Medical Journal*, Sept. 16, 1911.

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The habit of catching cold is acquired by the habit of wearing woollen garments next to the skin. Flannels are weakening, a weakened skin is like an open door for colds and chills to enter.

All who have worn Dr. Deimel undergarments for one winter wonder at the change for the better which has taken place with them. **They fail to understand** how they could ever have worn wool next to their skin.

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Corpus Luteum Extract.—C. F. Burnam, Baltimore (*Journal A. M. A.*, August 31), after reviewing the function of the internal secretion of the ovaries and the use of the extract, gives his personal experience in experimenting with the extract of the corpus luteum of the pig. Besides the experiments with dogs, which accorded with those of other observers, he tells his experience with the use of the extract in human patients, and concludes his paper with the following summary: "1. When given by the mouth, corpus luteum tissue of the sow, even in large doses, has little or no toxic effect on women. 2. It affords us a valuable means of controlling the nervous symptoms which occur in so many patients at the time of the natural or artificial menopause, giving relief to most sufferers. 3. It is a valuable remedy in treating patients with insufficient internal ovarian secretion during the menstrual life. This class constitutes a very large number of women. 4. It is an excellent remedy to induce menstruation in young women suffering from functional amenorrhea. Those who are fat, in addition to regaining menstruation, usually, but not always, lose weight. 5. There would seem to be a possibility for the use of drug in cases of unexplained sterility and repeated abortions. 6. Extensive use should be made of corpora lutea from the cow, sheep, and other animals to determine if these extracts work more successfully than those of the sow. The ideal luteum tissue for any animal is doubtless tissue from its own species, but this cannot be obtained for the woman. 7. So far as it goes, my work strengthens my conviction that Fraenkel is correct in attributing menstruation to the internal secretion of the corpus luteum. 8. From clinical experiences I am inclined to believe that the corpus luteum possesses different properties due to different chemicals. One of these substances causes hyperemia of the pelvic organs; another relieves nervous symptoms of a toxic character, as at the menopause. It would seem that this product acts as a neutralizer, since even large doses of the luteum cause no disturbance of a toxic nature. On the other hand, the toxic results of intravenous injections of the luteum extracts, as well as the nervous phenomena of menstruation, show that there must also be some toxic material present which is not absorbed from the stomach or intestines. All of these various substances may in the future be separated."

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Original Articles

SOME ASPECTS OF NEUROLOGY TO GENERAL PRACTICE*

By William Aldren Turner, M.D., of London.

Mr. President and Gentlemen:—

My first duty, a most agreeable one, is to express to you, sir, my cordial thanks for the invitation which you have given me to deliver the address in Medicine before the Ontario Medical Association at its thirty-second Annual Meeting.

In selecting a subject on which to address you, it has seemed to me that some of the aspects of Neurology to general practice would not be considered out of place. This choice has in consequence permitted me, among other matters, to make a few remarks upon psycho-therapeutics, a subject which is claiming much attention at the present time, especially on this side.

Dr. Hughlings Jackson.

I cannot, however, pass to the subject of my address without paying my tribute to the loss which clinical medicine, and more especially that branch of it which claims my attention, namely, the Diseases of the Nervous System, has sustained in the death of Dr. Hughlings Jackson, which took place last autumn.

He was the father of British Neurology, and all those whose activities are devoted towards this subject, whether as physiologists, pathologists or practitioners, claim him as their Master. His influence with his colleagues and upon his pupils was great, but his studious nature and retiring habits rendered him little known in the public life of the profession in London.

* Address in Medicine, Ontario Medical Association, Toronto, May, 1912.

He possessed a rare combination of mental qualities, keen clinical instinct with a strong philosophic bent. His teaching illumined many dark places and obscure corners of the Nervous System, and his original views upon the "levels" into which he theoretically divided that System, did much to clarify the study of its diseases. His name will long be perpetuated in that variety of localised convulsion which he described, and which is known as Jacksonian Epilepsy.

The Clinical Laboratory.

When a comparison is made between the practice of twelve or fifteen years ago and that of to-day, the most striking feature of difference will be found in the assistance which various auxiliary methods, more especially the clinical laboratory and the Röntgen Rays, have rendered to both the diagnosis and the treatment of disease.

The introduction of laboratory methods upon modern lines may be said to date from the investigations of Pasteur upon rabies and Koch upon the tubercle bacillus, and more particularly from the introduction by the latter of tuberculin injections.

It is only, however, within comparatively recent years that these methods have been so developed and extended as to form almost a separate department of practical medicine. So extensive, indeed, has been their application and so efficacious the uses of the laboratory in clinical work, that a new class of highly-trained and specialized practitioners has been solved.

There are many who think that clinical medicine is becoming too dependent upon the observations made in the laboratory, and that the old time method of studying the patient as the soil in which disease takes root and growth, is being too often replaced by examination upon disease in test-tubes. It will, I think, be generally admitted that the laboratory investigation is in many cases a most useful aid to the bedside examination, but should never be allowed to replace it.

In my own branch of clinical medicine, much useful information may be obtained with the co-operation of the clinical pathologist, but there are very few organic diseases of the nervous system, even in the early stages, a diagnosis of which cannot be made by a careful bedside examination along well-recognized lines. The readiness and completeness with which an opinion may be formed from an investigation of the cerebro-spinal fluid, should not be allowed to replace, but only augment, the usual bedside observations. But, notwithstanding, there are many morbid conditions in

which such an examination is desirable, and even essential to complete the diagnosis.

Lumbar Puncture, by means of which the cerebro-spinal fluid is obtained, was introduced originally by Quincke[1] in 1891. In the early days following its introduction, the cerebro-spinal fluid was examined with a view more especially to the differential diagnosis of the various forms of acute meningitis, and it still finds one of its most helpful applications in these diseases.

By its aid the cellular and bacterial elements of the fluid are examined and valuable information is obtained as to the precise form of meningitis and the nature of the infective agent.

In cerebro-spinal meningitis, Weichselbaum demonstrated the meningo-coccus in connection with a large polymorpho-nuclear increase. In tuberculous meningitis Widal and others showed that mono-nuclear lymphocytes predominate, while in the purulent forms of acute meningitis the polymorpho-nuclear cells are increased, and cultivation reveals the presence of staphylo, strepto and pneumococci.

The presence, however, of polymorpho-nuclear cells should not be regarded as proving the existence of suppurative meningitis, as they may be found in brain abscess, suppurative labyrinthitis and sinus phlebitis, without any direct implication of the cerebral membranes.

The bacteriological examination of the fluid also is far-reaching, for the absence of bacilli in serous meningitis, cerebral tumor and hydrocephalus would serve to distinguish these conditions from meningitis, notwithstanding the similarity of symptoms in some cases.

At a later date the investigations of Widal[2], Sicard and others of the French school, demonstrated the almost constant increase of the lymphocytes in certain chronic degenerative diseases of syphilitic origin, such as paralytic dementia and tabes dorsalis. According to Noune[3], a marked lymphocytosis is present in 100 per cent. of the former and 90 per cent. of the latter.

The constant increase of the lymphocyte count in these diseases, even in the early stages, was used as a means of diagnosis, when the usual clinical symptoms were not obtrusive. I have seen a few cases in which such an examination was necessary to establish a diagnosis, but in the majority, even in an early stage, some clinical signs will be found if carefully looked for.

The association of a slight increase in the lymphocyte count along with Argyll-Robertson pupils, (or loss of the pupillary light reaction), in a case presenting neurasthenic or other symptoms of

nervous breakdown, but without definite physical signs of tabes dorsalis, would scarcely be sufficient ground on which to base a diagnosis of this disease. This combination of symptoms is not uncommon, and considerable difficulty may be experienced in forming a differential diagnosis as to whether the case in question is of a functional or organic character.

Since the introduction of the Wassermann test a further reaction of importance has been added to diagnosis; but there are some physicians who rely upon cyto-diagnosis as of equal value in the differentiation of these cases.

It should, however, be mentioned that a lymphocytosis has been found in certain diseases of a non-specific character such as herpes zoster, Landry's paralysis and enteric fever.

The observation of Mott[4] and Haliburton that cholin was present in the cerebro-spinal fluid in organic diseases was at one time regarded as a possible means of establishing a diagnosis between organic and functional disorders of the nervous system. As this observation has not assumed sufficient pathological importance, and as the technique is complicated and difficult, the method has been abandoned as a diagnostic resource.

Recently the examination of the cerebro-spinal fluid for the Wassermann reaction has been undertaken, especially in the early stages of those diseases in which a specific causation is probable, and when the usual physical signs are either not present or only to an uncertain or equivocal extent.

Most practitioners see from time to time cases having a definite neurological or mental aspect, in which it is difficult to say from the physical signs alone, such as Argyll-Robertson pupils and alterations in the reflexes, whether the symptoms are functional and temporary, or indicate the onset of serious organic disease.

The cases to which reference is made are usually of adult age and commonly of the male sex. They may show signs of neurasthenic breakdown, some degree of mental depression or excitement, or acute insomnia for which no obvious cause is apparent. On the other hand, persistent headache, progressive loss of memory, epilepsy, and eclamptic convulsions or symptoms of arterio-sclerosis may be the outstanding features.

In this type of case, the examination of the blood and cerebro-spinal fluid by the Wassermann test is regarded as being of great diagnostic value, and as throwing much light upon the underlying structural changes. It is also a means of differentiating between functional and organic nervous conditions, occurring in syphilitic subjects.

The existence of a positive Wassermann reaction of the blood serum in the type of case just described would be an indication merely of the constitutional state, but would not throw any light upon the condition of the central nervous system.

If, however, a positive Wassermann reaction was found in the cerebro-spinal fluid as well, and if with this there was associated a large increase in the lymphocyte count, a diagnosis of parasyphilitic disease, most likely general paralysis, might with confidence be made.

There is also evidence that the reaction of the blood serum may be negative while that of the cerebro-spinal fluid may be positive in these cases. There are also cases in which the lymphocyte count is above the normal, but does not reach the high number found in general paralysis. This latter type is usually associated with a positive cerebro-spinal reaction. The significance of this type is less certain, but it probably points to a chronic inflammatory condition of the central nervous system.

The proportion of cases of tabes dorsalis which show a positive Wassermann reaction of the cerebro-spinal fluid varies from 5 or 10 per cent. according to Noune up to about 50 per cent. in Mott's[5] experience.

The examination, therefore, of the cerebro-spinal fluid by the Wassermann test has come to be of immense practical value in the differential diagnosis of functional and organic nervous conditions occurring in syphilitic subjects. Many cases occur, however, in which such an examination is unnecessary; it should, in fact, be reserved for cases in an early or equivocal stage, or for those in which the physical signs are not sufficiently characteristic.

Lumbar puncture has also been adopted as a therapeutic means, but its application for this purpose is limited and has been confined mainly to cerebro-spinal meningitis. The removal of a quantity of fluid is an operation not unattended by danger, and in disorders characterized by an increase of the intracranial pressure, such as cerebellar tumors, the risk would seem to be great. Removal of some fluid, however, is often of advantage in the coma of a cerebral hemorrhage, and in hydrocephalus. Lumbar puncture is also used to assist the effects of operation upon meningitis secondary to ear disease, when it acts as a temporary drainage for the removal of inflammatory products.

Serotherapy. The diseases of the nervous system do not lend themselves, so far as their study has yet gone, to treatment by serums and vaccines. There are, however, two maladies—cerebro-spinal fever and acute poliomyelitis—whose symptoms indicate

nervous derangement, but whose pathology places them under the acute infectious disorders.

The infection of the central nervous system through the posterior nares and naso-pharynx, the probable similarity of the infective agent in both diseases, and the fact that they are known to occur in epidemic and sporadic forms, have opened the way for a better study and have led to the view that they are probably of the same or similar pathogenic nature.

The artificial production of poliomyelitis in monkeys by Flexner[6] and others has thrown fresh light upon its pathogeny, but attempts to prevent or cure it after experimental production by means of serum or vaccines have not been encouraging.

For cerebro-spinal meningitis, on the other hand, a number of serums have been prepared, and their administration during the early days of the fever would appear to be of service.

Flexner states that he has largely reduced the mortality by the use of his serum.

It is difficult to make any authentic statement upon the use of serum and vaccines in the meningitides secondary to ear disease. Their employment, however, would appear to be of some value as an auxiliary method in operative treatment. An autogenous vaccine ought to be prepared and employed in all these cases, although its direct influence cannot at present be estimated.

The Röntgen rays find little application for their use on diseases of the nervous system. It was at one time thought that they might be of value in the location of tumors within the cranial cavity. This has not been found of any real value. They are, however, of decided value in the diagnosis of morbid conditions of the bony tissues surrounding the central nervous system, especially with reference to pituitary and other lesions at the base of the skull.

A minor, but at the same time interesting observation, has been made from their universal application in all cases of muscular atrophy affecting the small muscles of the hands. It has been found by X-ray photographs of the neck in many of these cases, occurring especially in young women, how frequently the presence of an additional or cervical rib is the cause of the muscular atrophy, and how satisfactory the recovery may be after the removal of the accessory piece of bone.

In cases of neurasthenia, accompanied by gastro and enteroptosis, the examination of the size, shape, position and motor action of the stomach and intestines may be easily and satisfactorily determined by tracing the course of a bismuth meal through the digestive tract by X-ray examination.

Too much importance cannot be given to this method of examining a portion of the body whose functions have so far not been open to a closer examination than could be obtained through abdominal palpation.

The Bromides in the Treatment of Epilepsy.

There exists a strong feeling in the popular mind that the prolonged use of the bromides in the treatment of epilepsy is not only useless, but actually harmful. One might even say that this feeling to some extent has taken hold of the medical mind. There is, in fact, in some quarters a reaction against the administration of bromides in the treatment of this disease.

There is no doubt that since the introduction of the bromides in 1857 in the treatment of epilepsy, most epileptics at some period in the course of their malady have been treated by these drugs. The almost universal prescribing of the bromides during the past half century, with more or less success, has to a large extent deprived such patients of the advantages which certainly may be obtained from hygienic, dietetic, and disciplinary lines of treatment.

The decision as to whether a particular case of epilepsy has been cured in the proper sense of that term is difficult to determine, as it is well known that attacks may recur even after an interval of twenty or more years. But it may be conceded that arrests of fits for a period of from five to ten years in a case which presents no mental stigmata and in which all treatment has been suspended may be deemed as cured.

It is just this difficulty in defining a cure which renders the discussion of the problem of the value of bromides so difficult. In the pre-bromide days—that is, before the year 1857—quite a number of cases of epilepsy were recorded by the French and English physicians as cured, the percentage varying from 5 to 13 per cent.[7] These are the results recorded by physicians who used remedies such as oxide of zinc, nitrate of silver, and belladonna, some of which have largely passed out of common use.

On the other hand, the statistics of those who have treated epilepsy with the bromides do not differ materially from those just mentioned. Since the introduction of the bromides the statistics of cured cases also vary from 4 or 5 to 12 per cent.[7] Medical writers, therefore, such as Pierce Clark,[8] of New York, and others, who favor the abolition of sedative drugs in the treatment of this disease, find in the above quoted figures a strong basis for their contention that the bromides are neither necessary nor desirable adjuvants to ordinary hygienic remedies.

It is therefore a matter of importance to ascertain whether any real basis exists for the feeling against the use of the bromides, or whether this view is only another instance of popular misconception, of which there are several examples in this disease.

My experience of the treatment of epilepsy extends over some sixteen or eighteen years, during which time I have prescribed for several thousands of epilepties in all stages and varieties of the malady.

I can without hesitation say that the influence of the bromides upon epileptic fits is both variable and uncertain. In a certain proportion of cases, amounting to about 25 per cent., so much benefit is derived that the attacks are either permanently or temporarily arrested. It is probable that the spontaneously curable cases of the disease are found in this group, cases which in the view of some writers are arrested not in consequence of, but in spite of, the remedy. The curable types of epilepsy are recognizable early in the disease, and in them I consider early and persistent use of small doses of the bromides most essential.

In a second group of cases, amounting to a further 25 per cent., some improvement is derived from the administration of the bromides, mainly in the direction of lessening the frequency and severity of the fits. This may be looked upon as the common temporary result of bromide treatment, and is what may with confidence be expected in many cases in the early stages of the disease.

In the remaining group, amounting to about 50 per cent., the bromides either have no influence at all upon the fits or are actually deleterious.

It is therefore obvious that about half the number of epilepties derive no benefit from the administration of the bromides, from which it might be argued that these salts are of little, if indeed any, use in the treatment of epilepsy. On the other hand, there is the 25-50 per cent. which derive great benefit from these drugs, including the 10 or 12 per cent. which are cured.

It is within the experience of most physicians, especially of those working amongst the hospital class, that no complete record can be obtained either of the number arrested or the duration of the arrest, as there is a tendency for the patient to cease attendance once he is relieved of his symptoms.

I hold that it is an error to say that the bromides are of no use in the treatment of epilepsy. If 50 per cent. of the cases derive some benefit from the administration of these drugs, then all cases of recent origin should be given the benefit of the remedy for a time.

I should, however, be the last person to neglect the value of diet, occupation, and general mental and physical hygiene in the sufferer from the disease. By these means the dose of the salt is kept at a minimum which will produce the desired effect; and the most successful and satisfactory cases of this malady are those in which a combination of sedative remedy, diet, and general hygiene are prescribed and administered under the care of a nurse, attendant, or other person, who will enter into every detail of the case and its treatment, both in the letter and in the spirit.

A few remarks upon some popular fallacies in connection with epilepsy may not be out of place.

In the first instance, as to "growing out" of fits. It has long been a popular idea that an epileptic on reaching a certain age or after a certain number of years of the disease, may outgrow his attacks. The age is variously stated, but 21 is frequently mentioned by the parents as having been the one given by the doctor.

There are two age-periods when "growing out" may be looked for. The first is the period of childhood between 4 or 5 and 7 or 8 years in those whose fits commence in infancy. In addition to being a period when fits may with some certainty be expected to cease, at all events for a time, it is also an epoch during which the onset of epilepsy is relatively uncommon.

The second is between the ages of 21 and 25 or 26 (adolescence) in those whose fits have commenced during puberty. I have elsewhere[9] shown that the quinquennial period, 21 to 25 years of age, is that one which seems most favorable for the arrest of epilepsy in those whose fits commenced between 15 and 20. This bears out a further observation that epileptic fits are more prone to arrest during the first three to five years following their onset. If therefore there is another period in which a patient may "outgrow" his fits, it is between the ages of 21 and 25 or 26, in those cases in which the disease has commenced during puberty.

There is no evidence that the climacteric period has any influence upon the arrest of epilepsy, except perhaps in a few isolated cases.

Secondly, as to the influence of the catamenia. The popular belief that the satisfactory and regular establishment of the menstrual functions will arrest the disease has no scientific basis. The onset of fits in girls is commonly accompanied by irregularity in the period, but it is rare to find any amelioration when the periods become regularly established. Physiological amenorrhea may or may not have a beneficial effect.

Thirdly, as to marriage. There would appear to be no real foundation for the widespread belief, mainly held by the less educated section of the community, that the marriage of an epileptic girl, especially if pregnancy results, favors the cure of the disease. On the contrary, although isolated instances of such a cure occur, the consequences of matrimony tend to the production of circumstances distinctly unfavorable to the arrest of the disease. That there is no certainty in the influence of marriage upon epilepsy is the result of the observation of most writers on this subject.

The influence, however, upon the individual is relatively small as compared with that upon the offspring, and the consequent transmission of the disease. In definitely hereditary cases it is probable that one or more children out of several will become epileptic; there is no certainty that any of the offspring will suffer, although it is unlikely that all will escape.

Mind and Body—Hysteria.

It has been the custom in the teaching of the schools largely to disregard the mental side of disease, and to consider as altogether a special study symptoms and diseases based upon a psychical foundation.

Perhaps, under existing arrangements, such a dissociation is necessary, but the close inter-relation between mental and physical symptoms is all-pervading, and there will be an advance in clinical teaching when this aspect is more decidedly brought before the attention of students during their hospital career.

In the first place, there is no physical disorder, however slight, which does not produce some effect upon the mind, though varying in degree according to the temperament. Every practitioner is aware how much the course and treatment of an acute inflammatory or other malady depends upon the mental attitude of the patient, according as he regards his condition from a hopeful or a pessimistic aspect.

There are many persons who consider that the onset of some unpleasant or unaccustomed sensation in any part of the body signifies the development of a serious disease, a form of spurious hypochondriasis, which only requires the *ipse dixit* of their physician to dispel. But a type of case is occasionally met with in which the commencement of a grave and incurable malady may be preceded or accompanied by fears in the patient's mind that such a calamity is in store for him. It is, in fact, a presentiment of actual physical disorder, and sometimes of dissolution.

Then there is the genuine hypochondriasis, a morbid fear of disease affecting one's body, which is a mental disease *sui generis*. It may develop, as Freud[10] has explained, out of an anxiety neurosis, or a more permanent state of hypochondriasis may issue out of a temporary neurasthenia or physical breakdown.

Further, we recognize the influence of nervous and physical emotions in the causation of physical symptoms. According as an emotion is pleasurable or painful, we find respectively increase of the heart's action, increased muscular energy and a sense of well-being, or inhibition of the gastro-intestinal functions, a keen sense of fatigue, and a decrease of muscular energy.

The effect of an emotional influence upon the physical condition has been ingeniously shown by the experimental researches of Pawlow[11] on the salivary secretion of dogs.

In the course of his experiments it appeared that all the phenomena which were seen in the salivary glands under physiological conditions reappeared in exactly the same manner under the influence of psychological conditions. Thus when he pretended to throw pebbles into the dog's mouth or to cast in sand, or to pour in something disagreeable, or when it was offered this or that kind of food, a secretion either immediately appeared or it did not appear, in accordance with the properties of the substance, which he had previously seen to regulate the quantity and nature of the juice when physiologically excited to flow. If he pretended to throw in sand a watery saliva escaped from the mucous glands; if food, a slimy saliva; if the food were dry, a large quantity of saliva flowed out, even when it excited no special interest on the part of the dog. When a moist food was presented, less saliva appeared, however eagerly the dog may have desired the food.

When this subject is viewed more especially from the clinico-neurological standpoint, it becomes evident that many depressive states, characterized by hesitations, doubts, scruples, anxiety, apprehensions, and morbid fears, are associated with derangements of the bodily functions, such as dryness of the mouth, furring of the tongue, flatulence, constipation, and the like.

Owing to the lessened vascular tone of the emotional depressive states, the body also is more prone to physical disorder and more ready to receive the encroachments of infective organisms.

Mental influences may so modify the appearance of disease that a wrong impression sometimes may be conveyed to the physician's mind. Most of us may recall occasions when it has seemed as if a fatal termination were imminent, when in reality the gravity of the

situation was dependent upon a depressive mental state rather than upon true physical weakness.

How far the persistence of emotional and mental influences when continued for many years may predispose to organic disease by permanently impairing the secretions, and altering the vascular tone, is a subject less clearly defined.

Probably the most characteristic effect of an acute emotional shock, acting upon the mind of a person predisposed to such influences, is the production of those physical and mental symptoms, paroxysmal or paralytic, which go towards the make-up of a case of acute hysteria.

Hysteria is a disease which has excited interest and curiosity throughout all time. Its nature and causation were as much a source of speculation to the ancients as to ourselves. As its name implies, the disease was supposed to originate in the womb. As a later development, this idea was supplanted by the view that the sexual organs in general were concerned in the production of hysterical phenomena. The most recent hypothesis, enunciated only during the last few years, again places the causation of hysteria in sexual disturbances, but based in this case upon a psychical and not a physical foundation.

Our modern conceptions of hysteria, however, are mainly founded upon the observations and writings of Briquet, Charcot, and the Salpetriere School. It was recognized by them that hysteria was no privilege of the female sex, but that its origin had to be sought for in disturbances of the psychical functions of the brain. Charcot expressed his strong belief in the psychical nature of hysteria, and demonstrated the possibility of reproducing hysterical symptoms by hypnotic suggestion and of effecting their disappearance by a similar means.

Since his time the psychical side of hysteria has been greatly developed, and this aspect of the subject is the one which now commands the most respect.

The theories of "Nervous Mimicry" (Paget) or of "Paralysis from Idea" (Reynolds) have been displaced, and replaced, by the broader view of the subconscious mind and of the dissociation of the personality.

I shall now refer very briefly to the three chief theories of hysteria, which at the present time attract most attention. They all view the malady from the psychical side, two of them make use of the theory of the subconscious mind (Janet, Freud), and the third emphasizes the cardinal importance of suggestion (Babinski).

Let us look first at the theory of Janet,[12] the distinguished psychologist of the College de France. His theory is based on the view that just as a normal person sees objects in the peripheral portions of his field of vision, as well as in the centre, so the normal mind can take in and arrange sensations, memories, ideas, and emotions, the comprehensiveness of his perception being the field of normal consciousness.

Janet's definition of hysteria implies a retraction or limitation of this field of personal consciousness, and a tendency to the dissociation and emancipation of the systems of ideas and functions that constitute personality. In other words, "in proportion as the field of personal consciousness diminishes so do the subconscious mental conditions tend to flourish and abound." (Ormerod.)[13]

By this means Janet explains most of the characteristic symptoms of hysteria. "The crises or fits of hysteria are somnambulistic states in which the patient lives some scene over again, goes through some action, or gives himself over to some idea and obeys it to the exclusion of all others. He is in a dream, living for the moment in a small world of his own. All this is forgotten when the attack is over, and he returns to normal consciousness." (Wilson.)[14]

Such is the explanation of those cases of hysterical fugue or lapse of memory which are met with from time to time. It would also appear to offer an explanation of the classical hysterical fit which is more commonly seen amongst the Latin peoples, a fit characterized by much display of pantomime and histrionic effort. On the other hand, as suggested by Ormerod, it hardly offers a sufficient explanation of the simple hysterical fit or "attack of hysteries" which forms the common type of the seizure in our patients.

The same idea may be traced in the motor and sensory symptoms—the paralyses and the anesthesias. In the former, the memory, the idea, or the function of movement, may be lost; in the latter, the systems of sensations, or some of them coming from the anesthetic area are no longer connected with the main consciousness."

According to many writers, Janet's view of hysteria, thus briefly and imperfectly mentioned, is the most satisfying, and that one which harmonizes the varied and multiform symptoms of the disease. But even those who support it most warmly feel that it does not explain every variety of the malady.

The second theory is that associated with the name of Babinski,[15] the physician of La Pitie, who has done more than any living clinician, by his observation on the plantar reflex and by other tests, to assist us to distinguish between functional and organic

paralysis. He holds that hysteria is a special psychical state, giving rise to certain symptoms, which can be reproduced by suggestion with rigorous exactness in certain subjects and be made to disappear under the sole influence of persuasion.

By this means Babinski confines the symptoms of classical hysteria to those which can be reproduced by suggestion. These are the convulsions, paralyses, contractures, tremors, and anesthesias, and to them he has given the term "pithiatic." He has, in fact, taken one of Charcot's main contentions, that to be hypnotisable is to be hysterical, and that exaltation of suggestibility is common to hypnosis and hysteria, and made it his criterion of hysteria.

One of the most interesting deductions from the Babinski view is that hysterical hemi-anesthesia does not really exist, but that when present it has been suggested to the patient by maladroit examination on the part of the physician.

In one hundred consecutive cases of hysteria Babinski failed to discover a single instance of hemi-anesthesia. There is, however, a general consensus of opinion that this explanation is only true for a limited number of cases.

Babinski's views have been strongly criticized, chiefly in the direction of the value of suggestibility as a crucial test of hysteria. It has been stated that the majority of normal persons are suggestible. "To be suggestible and to be hysterical are not synonymous. It is generally agreed that suggestibility cannot be utilized to describe sufficiently and exclusively the hysterical mind. Hence we are led to consider hyper-suggestibility as a symptom and effect rather than a cause of the mental state associated with hysteria." (Wilson.)

The third theory of hysteria to which reference is made is that elaborated by Freud,[16] the Viennese psychologist. His view is based on the acceptance of certain doctrines—the determination of mental processes by unconscious physical factors, the existence of what he calls emotional "complexes" which are often in antagonism with each other, and the causation of many mental phenomena as a result of repression. In this, as in Janet's view, there is a recognition of the sub-conscious mind.

Freud's psychology of hysteria is, briefly, as follows: If in a person two sets of mental or emotional "complexes" are present in opposition to each other, or a mental, or moral, or emotional shock is received, for example, a physical trauma, a painful impression is made upon the mind. If relief is not obtained in an ordinary way, as by giving vent to the feelings, or forgetting, the painful emotion is repressed into the sub-conscious strata of the mind. There it is

kept and prevented from returning to consciousness by the action of a resisting force, which is the same as that which originally brought about the repression. The repressed complex remains in the sub-conscious mind behaving somewhat in the nature of a foreign body, capable of influencing consciousness, but in a distorted or indirect way. In hysteria it is converted into the physical manifestations of the disease, such as the paralyses and the anesthesias. How this "conversion" is produced is a complicated and elaborate subject, which cannot be entered into here.

The outstanding feature of Freud's hypothesis is that the repressed complexes are invariably of a sexual character. In his own words: "He who can interpret the language of hysteria can understand that the neurosis deals only with repressed sexuality." "In a normal *vita sexualis* no neurosis is possible."[17]

"In the hysterical we find all sex components which exist in the undeveloped sexual constitution of the child in a state of repression. The essential basis of hysteria is thus the preservation of an infantile form of sexuality and the failure of the latter to develop into the normal adult type. The hysterical symptom is produced as a compromise between the normal outlet, the abnormal outlet, and the repressing forces exerted by education and environment." (Hart.)[18]

It is difficult at the present time to express an opinion upon the value of Freud's views upon hysteria. He has revived the oldest doctrine of the disease (its sexual origin), but upon a psychological basis. In reintroducing the sexual element as the sole factor in hysteria and allied neuroses he has opened the floodgates for a veritable torrent of criticism. He has been attacked vigorously by his opponents and as strenuously supported by his disciples and admirers.

Any criticism, however, of Freud's view ought to separate the hypothesis which he has enunciated, such as his conceptions of conflict, repression, and the influence of the sub-conscious mind from the method of psycho-analysis, by which he has arrived at his conclusions. There is a strong body of opinion against the universal application and acceptance of the sexual origin of hysterical symptoms. Moreover, his views upon the "conversion" of a repressed idea into the physical symptoms of hysteria would require some further explanation than has yet been given.

Psycho-therapeutics.

In view of the generally accepted psychical origin of all hysterical symptoms, as well as those of the closely allied psycho-

neuroses, such as the mental symptoms of neurasthenia, morbid fears, dreads, obsessions, and the like, it is not unnatural that the present-day methods of treating those conditions should consist in the main of psychical measures.

The influence of some kind of suggestion in the treatment of functional nervous disorders has been admitted from time immemorial; witness the influence of religious faith. But apart from this, have we not the cures affected by charlatans, by the pseudo-scientific methods of metallo-therapy and the like, and by the wonder-workers in all countries.

The moral influence of medical men over their patients has, of course, been long recognized, but there would seem to be something more than verbal encouragement or reassurance necessary in the psycho-therapeutics of to-day.

As Mills[19] says: "In a sense, mystic medicine is psychical medicine, though the converse is not true. In the incantation of medicine men, in the appeals to omens and oracles, in the resort to healing shrines, and in the ministrations of the Christian Scientist, the psychical element is discoverable. The psychical medicine of today, however, is that in which the use of mental influence is resorted to on the same scientific lines, as is the use of water, medicines, electricity, or the surgeon's knife."

The modern methods of psycho-therapeutics are limited to the following:

First, *direct suggestion*. Of this there are two kinds, in one of which suggestion is effected during hypnotic sleep, in the other during the waking state. During hypnosis the physician introduces new ideas into the patient's consciousness or effects the destruction of existing ideas without the consent or judgment of the sufferer. In suggestion during the waking state the patient voluntarily places himself in a receptive condition to receive and accept suggestions made to him by the physician without argument or reason.

Suggestion during the waking state was introduced as a therapeutic method by Bernheim of Nancy, as a development out of hypnotic suggestion. According to Dejerine,[20] its good effects are based partly on wonder-working and partly on auto-suggestion. In most cases, however, it is really a form of persuasion. Dubois[21] holds that between suggestion and persuasion there is the same difference as exists between a piece of good advice and a practical joke. "Both may produce the desired result. Suggestion acts like a draught which is merely capable of producing an effect on the imagination. It is sometimes excusable, but it is not conscientious." (Dubois.)

There is no doubt, however, that in practice suggestion during the waking state may be of distinct value in certain early and mild cases of psychical upset.

Secondly, *persuasion*. This implies the re-education of the patient's mind by reasoning and argument. This method was introduced by Dubois of Berne, and in various modified ways is the remedy applied by many physicians who work along psycho-therapeutic lines. The physician endeavors to reason with and educate his patient in the causation and production of his symptoms. It is, in fact, what may be called the method of *therapeutic conversation*. Its object is to teach and convince the patient "what he has, what he has not, what he seems to have, what he can do, what he cannot do, and what he simply believes he cannot do." (Mills.)

But there would appear to be something more in the method than mere verbal explanation. In Dejerine's words, persuasion reasserts the patient's confidence in himself, and revives those elements which make him master of himself. The physician's part lies in redirecting the patient's thoughts; there is nothing bordering on suggestion and nothing to clash with his convictions and reason. Its good effects are due to the confidence which the physician inspires in his patient.

It is therefore obvious that it can only be effective in sane persons, and is of no value in severe obsessional conditions or melancholia.

Thirdly, *psycho-analysis*. Re-education of the patient, in the meaning and significance of his symptoms implies some degree of psycho-analysis on the part of the physician. In a general sense, it is nothing more than a careful and exhaustive investigation into the origin, relation, and importance of existing symptoms.

In the sense employed by Freud,[22] however, psycho-analysis is a more elaborate proceeding, and requires skill, patience, and perseverance. It is not my intention to describe the method, but merely to point out that its object is to get behind the "censure," or repressing force which originally repressed and keeps suppressed the pathogenic idea in the sub-conscious strata of the mind. This pathogenic idea, it will be remembered, is that which gives rise, in Freud's view, to the symptoms of hysteria and the psycho-neuroses. Having by psycho-analysis overcome this resistance and given the "affect" an opportunity of flowing out through speech, the repressed idea is "brought into associative correction by drawing it into normal consciousness through the suggestion of the physician." (Freud.)

In the hands of Freud himself and of his disciples, both in Europe and on this side, the method is stated to be of practical value, but one cannot help feeling that, owing to the prominence given to the sexual side in the causation of hysterical symptoms, harm may accrue by recalling sexual memories, in themselves perhaps harmless, which had long been forgotten.

During the analysis it is not unlikely that the physician may unwittingly suggest to his patient, and in turn may himself be misled.

In Freud's sense, therefore, psycho-analysis is the evacuation of a repressed idea by a form of confession, and the re-conduction to the patient's consciousness of the thoughts underlying the symptoms. It would appear to be of great use in hysteria and some of the psycho-neuroses, but to be of little value in neurasthenia and states of anxiety.

I do not think that it requires much experience of the practical application of these methods of psycho-therapy to realize that they have their limitations. There are some psycho-neuroses of short duration and slight degree, which are readily cured by a little reasoning and convincing on the part of the physician; but there are many instances of obsessions, hesitations, doubts, anxiety, and morbid fears, which are difficult to cure by psychical means alone. On the part of the physician a knowledge of the causes and symptoms of hysteria and allied neuroses is essential, as well as a clear insight into the temperament of the patient. On the patient's part, faith in the method and in the man behind the method are essential to success.

I do not imply that it is not in the power of every earnest physician to so influence the mind of his patient by dissipating pessimism and by encouraging a healthy outlook to materially aid a cure.

But for the successful treatment of the psycho-neuroses by psychical means, a thorough knowledge both of the diseases and of the means of treatment is essential. A special class of practitioner has, in consequence, arisen; but it would seem to me as if those who give their attention to mental and nervous diseases are those best qualified to undertake this work.

I am, therefore, in complete agreement with those who advocate the necessity of physical means in conjunction with psycho-therapeutic efforts. The isolation of the patient in a home, institution, or special ward, the deprivation of visits from relatives and friends during the course of treatment, the cutting off of correspondence and the like, are all essential adjuvants to a successful issue. Rest

in bed, either indoors or in the open air, abundance of milk, massage, and regulated exercises are desirable in the majority of cases.

References.

1. Quincke. *Berlin. Klinisch. Wochenschrift.* 1891.
2. Widal. *Rev. Neurolog.* 1903.
3. Noune. Refd. by Stertz. *Wien. Med. Klinic,* No. 4. 1912.
4. Mott and Haliburton. *Brit. Med. Journ.* 1904.
5. Mott. *Brit. Med. Journ.* Nov. 8, 1911.
6. Flexner and Lewis. *Journ. Amer. Med. Assoc.* 1909.
7. Turner. "Epilepsy," p. 212. 1907.
8. P. Clark. *Archiv. of Int. Medicine.* 1912.
9. Turner. "Epilepsy." 1907.
10. Freud. *Selected Papers:* trans. by Dr. Brill. New York. 1909.
11. Pawlow. Refd. by Morton Prince. *Journ. of Abnormal Psychology.* 1907.
12. Janet. "Major Symptoms of Hysteria." 1906.
13. Ormerod. *Brain,* 1911.
14. Wilson. *Brain,* 1911, to whose critical digest on *Hysteria* I am indebted for much information.
15. Babinski. *Soc. de Neurol.* 1901.
16. Freud. *Selected Papers.* Dr. Brill's translation. 1909.
17. Dr. Brill's trans., p. 188.
18. Hart. *Brain.* 1911.
19. Mills. *Monthly Cyclopedia.* July, 1908.
20. Dejerine. "Les Psycho-Névroses." 1911.
21. Dubois. "Psychical Treatment of Nervous Disorders." 1909.
22. Freud. *Selected Papers.* Op. cit. Chap. 4.

Cardiac Asthma.

Rosin (*Deutsch. med. Woch.*) says treatment must be rapid and heart tonics should be given by subcutaneous, intramuscular or intravenous injection, as drugs given by the mouth disturb respiration and are defectively absorbed. Camphor in a 10 per cent. oil solution is very useful and indispensable during attacks. The injections can be repeated every fifteen minutes.

TETANUS*

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It is not my intention to enter into a comprehensive discussion of tetanus, but merely to report a case which occurred in my own practice a few months ago.

On December 28th, 1911, I was called out to see G. S., a farmer, fifty years of age, who had got his left thumb crushed in the gearing of a gasoline engine, which he used for cutting feed for his stock, and also for sawing wood. The engine was therefore used around the barn or in the woodyard, two very likely places to find the tetanus bacillus.

As he lived a considerable distance out in the country, and at the time the roads were bad, it was about two hours after the accident before I was able to see him. In the meantime they had wrapped the injured part up in some old cotton, which, though not sterilized, had been recently washed. As the bleeding was very profuse, they made no attempt to cleanse the wound, but merely wrapped it up in the oil and dirt, of which there was a liberal supply. On examination I found the terminal phalanx and about ¼ inch of the distal end of the first phalanx ground to a pulp. The fleshy part of the thumb was very badly mangled and a large amount of oil and dust was ground into it. The bone was absolutely bare as far as the metacarpo-phalangeal joint.

I cleansed the wound first with gasoline, to remove as much of the oil as possible, then scrubbed it with a sterile nail brush and 1-60 carbolic acid solution until all dirt was apparently removed. I then rounded off the distal end of the remaining part of the first phalanx with bone forceps and succeeded in getting enough tissue to cover it very nicely. I dressed it with bismuth formic iodide and plain sterile gauze, applied a splint, and kept the hand in a sling.

I saw him on the following day and he was quite comfortable. Had rested well all night without an opiate, and his temperature and pulse were both normal. I saw him again on the second day. His temperature was then 100°, pulse 80. I removed the dressing, but the wound was perfectly dry; there was no swelling or pain, so I simply put on a fresh dressing similar to the previous one, and as his bowels had not moved since the accident I gave him a laxative, and the following day he reported that he was feeling much better.

* Read at Ontario Medical Association, Toronto, May, 1912.

I did not see him again until the fifth day. His temperature was then 100°, pulse 96, and he complained of slight darting pains in the thumb, but more especially in the back of his neck. I removed the dressing, but the wound was apparently healing by first intention, so I simply dressed it again in the same manner as before. The following day his brother telephoned me that his jaws were stiff, was more or less chilly, and felt rather miserable in a general way. I went up immediately and found his jaws locked to such an extent that it was impossible to insert the handle of a spoon between his teeth. The muscles of his back and back of the neck were quite rigid. The muscles of the trunk were also involved to quite an extent and, to use his own expression. "He felt as if there were tight bands around him." The movements of the chest were certainly considerably restricted and the abdominal muscles were so rigid that it required quite heavy pressure to make any indentation in the abdomen. The muscles of the extremities were not much affected, although he said they felt stiff and he could use them only with difficulty. The muscles of expression were very markedly affected. The corners of the mouth were drawn back: the alae nasi were drawn out and more or less fixed: the eyes were widely open, the eyebrows arched and the forehead wrinkled, giving a fairly well-marked sardonic grin. The pulse at this time was 110 and the temperature 101°. On examining the wound I found a few drops of pus at the base of the stump on the palmar aspect: otherwise the wound looked perfectly healthy and had apparently healed throughout.

I told the patient's friends that he undoubtedly had tetanus and advised the use of anti-tetanic serum: but owing to the fact that the incubation period had only been six days and that there would necessarily be 24 to 36 hours more elapse before I could get the serum, I gave rather a gloomy prognosis. The patient's brother then informed me that the patient had a horse die of tetanus only a few weeks previously.

Though tetanus had been known to physicians since the time of Hippocrates, and the development of the disease in connection with wounds was well known, it was not until Nicolaier discovered the specific bacillus in 1884 that its infective nature was established. And it was not until Ehrlich, about 1890, showed experimentally that tetanus was an intoxication, and that the bacillus remained localized in the wound, that it began to be treated on a rational basis. Prior to Ehrlich's discovery it was considered necessary to excise the wound or amputate the infected part, but since it has been shown that the symptoms are due to the toxin absorbed

it has been found that strict antiseptic treatment of the wound is followed by as good results as the more heroic measures of excision or amputation.

For convenience I may take up the treatment under the four following heads:

1. Local treatment of the wound.
2. General treatment.
3. Specific or serum treatment.
4. Medicinal.

1. *Local Treatment.*

I removed all the stitches and freely opened up the wound at the point where suppuration was occurring, and thoroughly cauterized it with pure carbolic, and left the wound exposed to the air without any dressing. I also left a solution of carbolic acid 1-40 with the patient, with instructions to moisten the wound with it every two hours, but twice daily throughout the acute stage I swabbed the wound out thoroughly with hydrogen peroxide and then cauterized with pure carbolic acid.

2. *General.*

For the first day or two the patient was rather restless and irritable, but he occupied a room which was rather noisy. I had him removed to a quiet room, partially darkened, and excluded all except those who were actually nursing him. He seemed to appreciate the change very much, and when we remember that the tetanus toxin has a selective action on nervous tissue, and greatly increases its excitability, one of the first principles of treatment ought to be to avoid as far as possible all external stimuli. Some claim that blue light is much more soothing to these cases than ordinary light, but I found that modification of the light by drawing the ordinary blind was just as effectual in this case. Feeding is sometimes a matter of difficulty. In this case, however, he was able to take enough milk through his teeth to make rectal or nasal feeding unnecessary.

3. *Specific or Serum Therapy.*

It has been shown beyond doubt that the presence of pyogenic organisms greatly increases the virulence of the tetanus bacillus. It has also been shown that the toxins produced by the tetanus bacillus are absorbed largely along the nerve trunks and by them are conveyed to the spinal cord. Only comparatively small quantities of the toxin pass into the general circulation through the lymph

channels. And while it has been demonstrated beyond doubt that the tetanus antitoxin can neutralize absolutely the tetanus toxin outside the body or in the circulating fluids of the body, yet, unfortunately, it has been as clearly proven that the antitoxin in the blood or lymph stream can only neutralize in a very slight degree the toxin passing along the axis cylinder or in the nerve cell. These facts have a very important bearing on treatment, and undoubtedly go to show that the sooner the serum is given in a suspected case the better. Some claim that when the specific symptoms by which the disease is recognized have appeared it is already too late for the antitoxin to have any good effect, and while all are willing to admit that its efficiency is lessened the more advanced the case, it does not follow that it is of no effect at all. It is impossible to know in any given case whether the amount of toxin taken up by the nerves is sufficient to cause a fatal termination. Even in advanced cases, therefore, we may so limit further absorption by use of the serum that the balance would be turned in the patient's favor, whereas if it were not given sufficient further absorption might take place to cause death.

It is largely to show that even late administration of anti-tetanic serum is not without effect that I thought this case worth reporting. When I saw him on the sixth day after the injury the symptoms of tetanus were well marked and developing rapidly. There being no serum obtainable in town, a further delay of 36 hours was necessary. In the meantime, however, I gave him a 2% solution of carbolic acid hypodermically, which no doubt helped to hold the disease in check. Of this solution I gave him 2 drams hypodermically to start with and ½ dram every two hours until the serum arrived. It was about 2½ days, therefore, after the onset of the characteristic symptoms of tetanus before the serum was obtained. I used the serum put up by Parke, Davis & Co., and administered 6,000 units every six hours for the first three doses, then 6,000 units every twelve hours. There was no appreciable change until the fourth day of the serum treatment, when the spasm of the muscles of mastication was certainly considerably relaxed and I could get the end of my thermometer case between his teeth. From the second day after the appearance of the symptoms up to the fourth day of the serum treatment, the temperature ran from 102 to 103°, and the pulse the greater part of the time was in the neighborhood of 120. The temperature on the fourth day of serum treatment came down to 100° and the pulse about 105. I continued the serum treatment for five days, until a very irritating rash appeared and covered the whole body. It was a mixture of the scarlatiniform

and urticarial types, and for two days the patient was in a very distressing condition on account of the intense itching. As soon as the rash appeared, however, I discontinued the serum and, though it caused a good deal of distress at the time, it began to disappear on the third day, and by the fifth day was practically gone. Regarding the method of administration of the serum, there are, as you are all aware, five different methods of giving it, viz.:

1. Subcutaneous.
2. Intravenous.
3. Intraneural.
4. Subdural.
5. Intracerebral.

I started with the subcutaneous method, giving the serum into the subcutaneous tissue of the abdomen, and as the patient's condition did not grow any worse I continued to the end with the subcutaneous method. Every method of administration has its own supporters, but in whatever way it may be given I think it is pretty generally conceded that its chief influence is exerted on that part of the toxin which is in the circulation. The affinity of the toxin for the nerve cells is so great that, unfortunately, the serum has not much effect on this part, irrespective of the method of administration. Had the patient grown worse under the subcutaneous method I would have given it subdurally.

4. *Medical Treatment.*

During the acute stage of the disease, when the nervous excitability was marked, I gave him 30 grs. of chloral hydrate three times a day. This constituted the only medical treatment until after the serum was stopped. Though at that time there was still marked spasm of nearly all the muscles of the body, the muscles of mastication had relaxed sufficiently to get a small tablet in his mouth, and, according to the suggestion of Sajous in his work on the internal secretions, I gave five grains of thyroid extract three times a day, and I believe it had some effect, for when the patient was without it for a couple of days he complained more of the stiffness and seemed more comfortable after giving it again. I continued the thyroid extract for ten days, and by that time he could eat solid food and could walk about a little.

I saw the patient again a week ago, *i.e.*, about four and one-half months after the injury, and though he is quite well and does light work around the farm, he says there is still a slight sense of stiffness in all the muscles of the body, but not sufficient to interfere with his comfort to any extent.

Surgery

Walter McKeown, Herbert A. Bruce, W. J. O. Malloch, Wallace A. Scott, George Ewart Wilson.

Non-Union of Fractures J. S Horsley, Richmond, Va. (*Journal A. M. A., February* 3).

The fault in true non-union of fractures is due to the failure of the tissues to deposit lime salts, and after excluding all local and constitutional causes there still remains a group of cases in which this condition seems to occur and the bones fail to unite. There are two indications for the treatment of these cases, namely, to increase the quantity of lime salts in the blood and, second, to induce a larger quantity of blood-flow through the affected bone. The first indication is met by the administration of calcium salts, usually in the form of hypophosphates. Thyroid extract has been recommended, but its method of action is uncertain and reports are conflicting as regards its efficacy. It may, however, act as a hormone. The diet and personal hygiene must, of course, be carefully attended to. The second indication, increasing the circulation, must be carried out by local measures, and Horsley recommends the introduction of a sterile foreign body into the tissues to induce hyperemia. This idea was suggested to Dr. Charles Mayo by the fact that a sequestrum or a clot induces a growth of new bone around it. He therefore uses a sterile ivory pin in the medulla of the bone in cases of ununited fracture. It does not fit tightly, is unabsorbable, and instead of the ends being smooth they should be a little jagged, so as to induce blood-clots and hyperemia. Another useful measure is Bier's hyperemia, obstructing the venous circulation for from ten to forty minutes. Frequently in these cases the ends of the bone are one solid mass, which exhausts and blocks off the nutrition. Hence it is advisable to drill out the end of the bone and expose the medullary cavity, which is best done with a burr, though a small chisel may be gently used to enlarge the opening. Horsley reports a case, showing the difficulty of nutrition in these cases. The matter of fixation of the fracture is probably the least important matter. With good personal hygiene, absence of constitutional trouble and observance of the local indications, such as cleaning out the ends of the bone and roughening them and inserting an ivory pin inside, it matters little what method of fixation is used so the limb is put in

its proper axis. He uses a silver plate fastened by one or two screws in each end of the fracture. This is best placed on the periosteum, or, if that has been denuded, it should be sutured around the plate. The wound is closed without drainage and a plaster-of-Paris cast or some other splint applied. The retentive apparatus should be used for several months, changing it every few weeks. After three or four weeks it is best to begin the use of the limb very gradually, increasing it each day. The article is illustrated.

Chest Traumata.—F. T. Murphy (*Boston Med. and Sur. Jour.*), writing of stab or gunshot wounds of chest wall, refers to 42 cases treated at the Massachusetts General Hospital in the past 30 years, and analyses the symptoms, giving these points: 1. The very frequent complaint of abdominal pain, even though the peritoneum was not affected. 2. The possibility of serious hemorrhage from a wound of the intercostal artery. 3. The great power of accommodation of the lungs to hemorrhage or pneumothorax, if the change comes slowly on. 4. Relatively slight danger of fatal hemorrhage because of the collapse of the lung and the adherence of the pleura.

An outbreak of measles in the vicinity of Rosyth, where many naval base employes reside, is causing some anxiety. According to one account the epidemic is German measles, and the microbes have been deliberately let loose by an emissary of the German Government.—*Punch.*

THERAPEUTIC NOTES

High Blood Pressure.

Eustis (*South. Med. Jour.*) advises in cases of high blood pressure elimination by catharsis and copious administration of water if the heart muscle is functionating properly. The diet should be of substances which yield little or no tyrosin.

Pruritus Ani.

Wallis (*Practitioner*) says: The following formula will be found useful: Chloretone, one drachm; extract of conium, one drachm; euthymol cream, two ounces. The local skin area should be well washed with soap and water and the above applied.

Eclampsia.

Lichtenstein (*Zeits. für Gyn.*, Leipsic) says eighteen German physicians have reported a total of 4,585 cases of eclampsia, of which over 20 per cent., 955 cases, occurred post partum. He considers this an argument against premature delivery and supports the expectant treatment.

Secondary Anemia.

J. H. Musser (*Boston Med. and Surg. Jour.*) used ferric citrate prepared locally. Of the iron preparation .06 gm.; of the arsenic .06 gm.; of sodium glycerophosphate, .10 gm. dissolved in 1 c.c. distilled water. Treatments were given twice a week. Fourteen cases were treated, only one failing to respond.

Amenorrhea.

Rigamonti (*Gaz. deg. ospedali delle clinche, Milan*) has had effectual results in three cases of amenorrhea with one pole of the galvanic current to the sacrum and the other over the hypogastrium. He administered the treatment daily for thirty or forty sittings, and then at longer intervals.

Opium Poisoning.

F. Taylor (*The Lancet*) thinks the faradic current should be applied persistently in those cases where coma has reached the stage threatening life. Even if there is no response after thirty or forty minutes, but the contraction of the muscles, it should be continued. The portable faradic battery is all that is required.

Postanesthetic Vomiting.

The Therapeutic Gazette says, quoting Halperin: "How many of our surgeons or anesthetists would like to have their stomachs washed out just after a laparotomy?" Absolute rest in a quiet room, small swallows of hot water at frequent intervals, the application of an old-fashioned mustard plaster over the pit of the stomach, the use of one or two grains of acetanilide placed dry on the tongue or dissolved in a little brandy, or the use of from three to five grains of chloretone in a similar manner, will usually produce the results which are required.

Gastric Ulcer.

John J. Gilbride describes Lenhartz's method of treating gastric ulcer as follows: Put the patient to bed and administer a concentrated albuminous diet. This keeps the excessive acid secretion in the stomach, permitting the ulcer to heal. Absolute rest in bed for four weeks is essential. An icebag is applied to the epigastrium to prevent distension of the stomach and to favor contraction of the ulcer, as well as to relieve pain. If medication is indicated,—bismuth: Raw beef, if tolerated by the patient.

Furunculosis.

Henry K. Gaskell, speaking in a discussion on furunculosis before the Philadelphia County Medical Society, stated that the staphylococcic vaccine was especially valuable in furunculosis. In his cases the beneficial results have been seen in eighty to ninety per cent. of cures; the balance greatly improved. The majority of the cases were cured after the fourth injection. Begin with a dose of 250,000 to one c.c., increased, if necessary, to a billion. The furuncle he opened with the caustic stick for cosmetic purposes. Externally he employed from five to seven per cent. salicylic acid ointment. Not for the single boil, but for crops—furunculosis—should this treatment be employed.

Reviews

New and Nonofficial Remedies. Price, Cloth, 50c.; Paper, 25c.; pp. 298. Chicago: American Medical Association, 1912.

This book contains descriptions and a statement of the actions and uses of all articles which have been examined and accepted by the Council on Pharmacy and Chemistry prior to Jan. 1, 1912, for inclusion in the list of New and Nonofficial Remedies.

The book is unique. The work of the Council during its seven years of existence and the reports of the Propaganda Department of *The Journal A. M. A.* have convinced the physician that in the prescribing of proprietary remedies he must be more careful in his selection of those which he directs for his patients. Nowhere else can the physician or the pharmacist turn for reliable, unbiased information concerning the new remedies. This book enables the physician to make such selection and the careful pharmacist to know the character of the remedies he dispenses. It should be in the hands of every one of them.

What Shall I Eat? A Manual of Rational Feeding. By Dr. F. X. Gourand, formerly Chief of the Laboratory of the Medical Faculty of Paris. Only Authorized Translation into the English Language. Price, $1.50. New York: Rebman Company, 1123 Broadway.

It is essential for the medical man to know a good deal as to what people should eat both in health and in disease, for it is a very common question for the doctor to be asked: "What shall I eat?" Again, he is often asked: "Is this good for me?" or again: "Will this do me harm?" This book is set out in a clear, succinct and practical way, is very interestingly written, and gives just what practical information the physician wants to know of the subject. Our readers will find it a very satisfactory manual on the subject.

Wheeler's Handbook of Medicine. By William R. Jack. B.Sc., M.D., F.R.F.P.S.G., Assistant Physician to the Western Infirmary of Glasgow. Fourth Edition. Price, 8 shillings. Edinburgh: E. & S. Livingstone.

Medical science advances so rapidly these days that publishers are kept busy getting out new editions in order that their text-

books, as well as books of reference, are kept well up-to-date. Books of this character especially, as they are quite apparently of more value to the student of medicine, especially about examination time, need, therefore, to be brimful of the latest and best, succinctly set out. This is one of the best handbooks on the medical book market, is so complete, and withal so splendidly arranged, that we can heartily recommend it. Indeed, we consider that the busy general practitioner will be benefited by it, as its close and careful perusal will afford a rapid and practical means of reviewing old knowledge and acquiring the new.

The Pharmacopoeia of the Toronto General Hospital. Including Prescriptions for Use in the Various Departments, an Epitome of Surgical and Obstetrical Technique, and Tables of Foods, Doses and Poisons. Price, limp leather, 75c.; cloth, 50c. Toronto: University Press.

This is a neatly-gotten-up book of 142 pages, and will not fail of appreciation by all who have received their clinical training, or a part of it, in the Toronto General Hospital. It will also be intensely interesting and instructing to those who have received their training in other hospitals. The value of the book would be enhanced, especially to the recent graduate if, instead of grouping the prescriptions under general headings, some particular therapeutic indications were inserted after each prescription.

Special Classes for Short-Sighted Children.

Since the year 1908 the London County Council have had a special class for children affected with high myopia in a blind school at Camberwell. It is now found that additional accommodation is necessary for about one hundred children. The Camberwell experiment is declared to have been so successful that the Council are agreed to invite the assent of the Board of Education toward instituting special classes for this particular kind of scholar.

Could not Toronto profit by this experience? Since the recent system of school inspection has been inaugurated a number of highly myopic children have been discovered, who are quite unfit to compete with or be educated by the same methods as ordinary children. In the absence of facilities for instructing these children, I have had to recommend their admission to the Brantford Institution.

Dominion Medical Monthly

And Ontario Medical Journal

EDITED BY

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Surgery: Walter McKeown, Herbert A Bruce, W. J. O. Malloch, Wallace A. Scott, George Ewart Wilson.
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COMMENT FROM MONTH TO MONTH.

The salaries of Officers of Health do not appear to be anything nearly adequate for the services rendered to the community.

A first-class clerk in a department at Ottawa gets as much or more than the average health officer.

When a corporation counsel is sought or a chairman to some special commission wanted the salary buys the man. Our medical health officers must be considered a poor lot by the powers that be, to judge by the salaries attached.

In a large city where the corporation counsel gets $10,000 a year, the health officer is considered abundantly paid with half that amount.

In national, provincial, civic and municipal service the health officer is one of the outstanding and best of public officials. His work cannot be measured in dollars and cents, but it is there just the same and should be recognized by the authorities. The value of his services to the community cannot be balanced up with cold coin; but the commanding position public medicine is taking to-

day demands competent men and adequate compensation. It has come from the last place in medicine to run neck and neck with surgery and the best of the specialties. Indeed, in a few years it may be the most important branch of medicine.

No position in the medical public service known pays more than $5,000 per annum in Canada, and these could be counted upon the digits of both hands.

The authorities must understand that officials who are of such prime importance to the community and who are unselfishly spreading abroad the propaganda, "cleanliness is next to Godliness," are doing a great good work which should be awarded by remuneration commensurate with its importance.

Periodic examination of machinery is an essential part of any going concern. It has always been a well-recognized part of any business where the machinery is "inanimate." What, however, has been the policy as regards the "human machinery"? Neglect.

The worker must be in the best of health to rise to the maximum of efficiency. "Breaks" in this machinery have never been considered so costly by employers. But where "breaks" do occur there is more necessity for "timely repairs."

"Breaks" can only safely be detected by periodic medical examinations. Repairs can then be timely.

Life insurance corporations are beginning to realize that the "timely repair" of the policy-holder produces efficiency, economy, and dividends. Hence the annual medical examination has appeared. Employers of labor must soon realize the necessity for such medical examinations of employees.

In this way the health of employees will be conserved, the working force rendered efficient; and the worker, the employer, and the public will all gain thereby.

Most important will be the systematic examination of employees to discover incipient tuberculosis. As the appreciation of health grows industrial concerns will ultimately adopt the policy of these systematic medical examinations; for it is only by these that "early" cases will be discovered or "closed" cases transformed into "open" ones detected. It is only by some such systematic method

that "cure" or "arrest" and restoration to working capacity can be established.

What are public health authorities doing in this direction? And who will finance it—the employers or the municipality or the state?

The National Sanitarium Association proposes to erect and maintain in Toronto a Free Dispensary for Tuberculosis.

Towards this end a friend of the association offers to donate $50,000; and the association has asked the city for a central site on College Street, not far west of the new Toronto General Hospital, and equally contiguous to the University of Toronto.

The great good work done by the National Sanitarium Association commends itself to all, and the city should not long wait to grant their request.

Some may think, however, Toronto should erect and maintain a free dispensary of its own; but the National Association is well established in this business and has demonstrated its ability to conduct institutions of this character successfully.

The proposition to establish a detention hospital in Toronto is a wise one, and the sooner the city takes steps in that direction the better.

Now that the Ontario Government is moving the Toronto Hospital for the Insane to a location some twenty miles east of the city, the need for such an institution as a detention hospital will be more urgent.

The failure to provide proper accommodation for some of the insane, leaving them to be housed in the jail, is a sad blot upon administration of some sort.

Lack of funds is generally given as the reason, but it looks a great deal like listless inattention.

Now that the city of Toronto proposes to give $100,000 for the purpose, the jail may be fully reserved for its proper inmates.

News Items

Dr. Ralph Hooper, Toronto, has returned from Baltimore.

Dr. Embree, Toronto, is moving to 108 Avenue Road.

Dr. Grant Stewart, Montreal, has returned from Atlantic City.

Hon. John Henry Wilson, M.D., St. Thomas, Ont., is dead at the age of 79 years.

By the will of the late H. Markland Molson, Montreal, the Montreal General Hospital gets $10,000.

Dr. S. M. Hay begs to announce to the medical profession that in future he will limit his practice to surgery and consultations.

Dr. Graham Chambers has purchased the residence at the south-west corner of St. George and Bloor Sts., Toronto.

Dr. Daniel Clark, for many years Superintendent of the Toronto Hospital for the Insane, died the 3rd of June in his 78th year.

At the eighty-first annual commencement of Wesleyan University at Middletown, Conn., held on June 19th, the degree of doctor of laws was conferred upon Dr. Amos J. Givens, proprietor of Givens' Sanitarium for Nervous Diseases, at Stamford, Conn.

Amongst Canadian visitors in London are noticed the names of Mr. Irving H. Cameron, Toronto; Dr. J. O. Orr, Toronto; Dr. Jas. Third, Kingston; Dr. H. E. Cowper, Owen Sound; Dr. J. A. Dickson, Hamilton; Dr. R. B. Orr, Toronto, and Dr. E. E. Blanchard, P.E.I.; Dr. J. Parry Harrison, Dunnville, Ont.; Dr. L. G. Rowntree, London, Ont.

Dr. Charles Ferdinand Durand, late Proctologist to the German Hospital, Buffalo, N.Y., begs to announce to the profession that he has opened an office at No. 590 Huron St., Toronto. Tel. Hillcrest 2173. Office hours, 9 a.m. to 1 p.m. and 7 p.m. and by appointment. Practice limited to diseases of the rectum.

Publishers' Department

Mrs. MacKinnon's Massage Institution, 20 Walmer Road, Toronto. Telephone, College 7895. Mrs. Neil MacKinnon, for many years a specialist in all branches of massage, having received her training in the Old Country, has within the past few months opened an institution in this city at the above address. All forms of massage, including electrical, electric light, and needle spray baths are administered in this institution under her personal supervision. The location of her institution is one of the best that could be desired, and there is a beautiful conservatory with a southern exposure. There is a masseur in attendance for male patients. The rooms are large and sunny, the appointments being especially tasty and well adapted for carrying on such work. Physicians are invited to visit and inspect for themselves.

To cure practically any case of bed sores: wash frequently with a solution consisting of two drams of ammonium chloride, 4 ounces of water and 12 ounces of alcohol. Dry gently and powder with stearate of zinc. Of course the patient's position should be changed frequently and rubber air cushions should be used whenever required.—*Med. Rev. of Revs.*

Painting with iodine as a means of sterilization of the skin prior to operation has now become a regular procedure. This same method is now applied successfully to the vagina prior to vaginal operations. By the aid of two specula the vaginal walls are held apart and thoroughly swabbed with ether, and then with tincture of iodine. The cervix is included in the operation. Care must be taken not to leave any iodine in the vagina. The results are said to be much superior to the ordinary methods of douching.—*Med. Rev. of Revs.*

Ivy Poisoning.—Dermatitis venenata, always very unpleasant and occasionally dangerous, presents as long a list of possible medicaments as is claimed for pertussis or pneumonia. Recent studies have demonstrated the cause of the irritation, and it is now known

that the irritating agent may be neutralized by permanganate of potash solution. The application of the permanganate solution gives great relief, and when used soon after exposure or as soon as the first vesicles appear, will avert the distressing itching. Treatment should be as follows: First thoroughly wash the part or parts with warm water and soap; then use an alkaline wash, as, for example, a teaspoonful of bicarbonate of soda to one pint of water. Following this should come several washings in warm 2 per cent. to 4 per cent. solution of permanganate of potash. The strength of the permanganate solution should vary according to the severity of the attack.—*Med. Rev. of Rev.*

"The Medical Science."—Early one crisp March morning, D. K., unkempt and greasy, accepted my invitation to have a ride. For a few moments he scanned me in silence; then in Highland accents, difficult of reproduction, remarked, "You are a stranger in these parts?" I assented.

"Anyhow, I have not seen you before. Anyhow, you are a very ordinary-looking fellow. I mean, you are a very common-looking fellow. I—I—I mean to say, you have no big nose, or big mouth one would know you by."

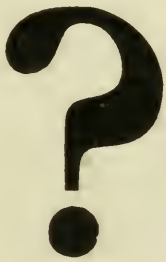
Having thus mollified me, he assumed the rôle of chief spokesman. "I used to sell the electric batteries; then I tried the patent medicines; and now I practise the Medical Science. Do you know what the Medical Science is?"

I pleaded ignorance.

He proceeded: "I will tell you of a particular case. Mr. H., of S., told me his back was very bad. I said, 'I can cure it.' So I looked him in the eyes until a film came over them—and they went shut. Then I stood at his side and stroked him up and down the back. Then I asked him if the pain was better. He said it was some better. I repeated the treatment, keeping up a stream of talk the whole time. He now said that he was well, but that he could not open his eyes. So I opened them for him. Now, that is the Medical Science."

At this juncture we overtook a well-known farmer, who called out, "Good morning, Doctor." Somewhat aghast, my companion exclaimed, "And are you a doctor!"

A few moments' drive brought us to the corner hotel, where the old man wished to alight. As I drew up, he inquired, "And will you be having something?" R. H.



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Publishers Department

PHYSICIANS' APPROVAL TO PRECEDE MARRIAGE.—Dean Walter T. Sumner of the Cathedral of SS. Peter and Paul, Chicago, recently delivered a sermon upon the "Sacrament of Marriage," in which he takes advanced ground in regard to marital relations. His position will meet the hearty approbation of the medical profession. Dean Sumner issued the following edict: "Beginning with Easter, no persons will be married at the cathedral unless they present a certificate of health from a reputable physician, to the effect that they are normal, physically and mentally, and have neither an incurable or communicable disease." "This step is taken only after months of study of the situation and deliberation as to its advisability. It is believed that this stand will meet with the immediate sympathy of the clergy in the churches at large, all of whom have long felt the undesirability of being party to the marriage of persons who, because of their physical condition, should never be allowed to enter into the marriage state and propagate their species." This is certainly a step in the right direction, and we sincerely hope to see Dean Sumner's excellent example emulated by others in Church authority, and may his sane and sensible policy act as a stimulus to physicians and legislators to continue the good work by introducing and enacting stringent laws in every State, for the purpose of restricting the marriage of the unfit. The attitude of the Dean of Saints Peter and Paul is right. The "Sacrament of Marriage" should not be disease polluted and eugenics should stand guard before the matrimonial altar. Matrimony should be no melting pot for vicious morbidity. The salvation of the race and the longevity of humanity is concerned in the matter.—*Alienist and Neurologist.*

VACCINATION EXEMPTIONS.—Mr. Crawshay-Williams asked the President of the Local Government Board if he would state the total number of declarations of conscientious objection to vaccination made in the years 1907, 1908, 1909, 1910 and 1911, and the percentages of these declarations to the births?

Mr. Burns: The total number of certificates or declarations of conscientious objection to vaccination received by vaccination officers during the calendar years 1907 to 1911, inclusive, and the per-

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centages of such objections to births registered during those years, were as follows, namely:—

	Objections.	Percentage of Births.
1907	57,675	6.3
1908	162,799	17.3
1909	190,689	20.9
1910	230,947	25.7
1911	248,483	28.2

Those who advocated the enactment affording facilities for exemption did not anticipate such a large proportion of neglect of vaccination. It is now generally admitted that very large numbers are exempted by parents who have no conscientious objection whatever to vaccination and whose decision would immediately be reversed in the presence of small-pox.—*Med. Officer.*

Autumnal Ailments.—The Autumn months constitute the season during which the average practising physician is called upon to treat the following conditions: 1. Typhoid fever, which is, more often than not, contracted at some unhygienic Summer resort. The patient may return home during the first week or so, with headache, malaise, etc., or the premonitory or primary symptoms may appear after reaching home. 2. Malarial infection, in certain sections, which is more than usually rife in the Spring and Fall seasons. 3. The after results of the gastro-intestinal disorders of infants and young children, due to improper feeding, etc., during the heated term. In almost every instance, when the acute symptoms have subsided, a condition of anemia and general devitalization is the final result that constitutes the essential indication for treatment. In convalescence from all forms of illness resulting in general debility, Pepto-Mangan (Gude) is the one ideal tonic and reconstructive. It not only revitalizes the blood, but also tones up every physiologic function. It stimulates the appetite, improves the absorptive capacity, increases energy and ambition and restores the blood to its normal condition. It is, thus, a general tonic and reconstituent of marked and certain value.

The Value of Radium.—There are no very exact statistics of radium available, but according to the United States Geological Survey the whole quantity in the world is probably not over two or three ounces, and its value, like that of the big diamonds of the world, is purely nominal. It is worth whatever the possessors can get for it. The head of the English corporation producing radium claims that it is worth approximately $100,000,000 a pound. A year ago this same person had estimated the value of radium at one-

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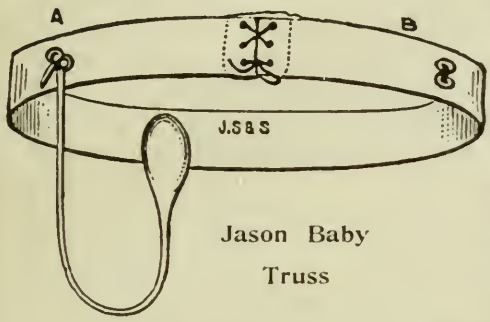

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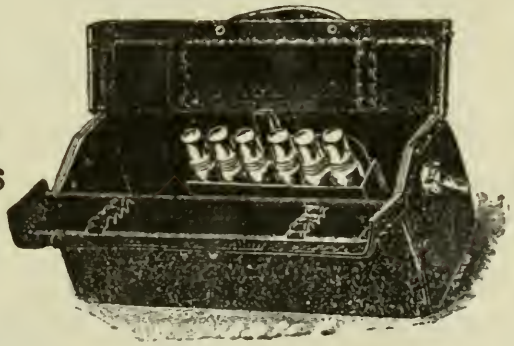

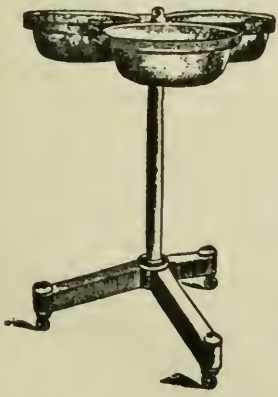

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third more. However, a little variation of $50,000,000 is not thought to matter where there is no appreciable fraction of a pound of the precious stuff in sight. The fact that has more than anything else to do with fixing the price is the existence of several radium banks in the world where tubes containing a microscopic speck of radium are rented out to doctors at something like $50 a day. While it is known to be of some value in treating lupus, which is a form of tuberculosis attacking the tissues, usually of the face, there is little else known about its medical value. It has been claimed on several occasions that radium was valuable in the treatment of cancer, but experiments have not proved this to be an absolute fact. A short time ago it was reported that the Austrian government had purchased the only two mines under private ownership producing the ores from which radium is made, and thereby gained a monopoly in its manufacture. This report, however, turned out inaccurate. It is true that the Austrian mines and the Austrian government heretofore have supplied the bulk of the radium salts existing in the world, but at the present time radium is being manufactured in three other countries, the United States included. Sweden is producing radium from kolm, the English are getting it from mines in Wales, while we get it from western Colorado, where there is a large deposit of radium-producing ore. These deposits produce also uranium and vanadium, the latter being used for making some of the high-grade steel alloys. While the mining pays in vanadium alone, the ore produces a certain per cent. of radium. Ten tons of it procure only between twenty and thirty milligrammes of radium. —*Sc. Am.*

The Ice Bag in Appendicitis.—In a most interesting article by A. M. Fauntleroy, Surgeon of the United States Navy, *Medical Record*, Aug. 3, 1912, the fact is brought out, basing the same upon a large number of cases of appendicitis operated, that the ice bag is positively harmful in this condition. In 50% of the cases operated, where the ice bag was used, the condition seemed to indicate that there was a noticeable lack of effort on the part of nature to wall off, from the rest of the abdominal cavity, the appendix, which was frequently very much congested, gangrenous or perforated. He also observed that in the ice bag cases there was a surprisingly low white cell count when one took into consideration the condition found in the abdomen at the time of the operation. From 8,000 to 11,000 white cells was the rule in these ice bag cases when one would be justified in saying that the pathological condition warranted a con-

Nutrition Depends Upon Small Matters

It is beginning to be recognised that it is a mistake to force hysterical, emaciated or tuberculous patients to take large quantities of "nutritious food," and that course will probably soon become as antiquated as the copious drugging of the past.

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in small quantities, taken as part of the daily diet, has been proved to increase the power of digestion and assimilation, for the series of tests made by Professor Thompson, M.D., Sc.D., at the Dublin School of Physiology showed conclusively that while Bovril was taken with ordinary diet the weight of the subject of the test was increased as much as from ten to twenty times that of the weight of Bovril taken.

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stitutional reaction of from 20,000 to 30,000 leucocytes, or even higher. On the other hand, in those cases in which the hot water bag or morphine had been used prior to operation (the ice bag not being used at all), the white count corresponded to what one would expect. Dr. Fauntleroy advances from his findings the logic that while the ice bag causes numbness, practically the same as in the condition of frostbitten ear or toe, it also decreases hyperemia, leucocytosis and stasis in the part to which it is applied. That heat is the direct antithesis of cold in encouraging favorable physiological action in inflammatory processes, whether superficial or peritoneal, seems to be from his report most logically and conclusively proven. In applying heat whether it be for peritoneal or inflammatory conditions of a more superficial character, the most rational method is to use that which is not only sanitary, but, for the comfort of the patient does not require frequent changes. In this respect, antiphlogistine, on account of its heat retentive properties, its cleanliness, and its ease of application, should appeal to the professional mind. That antiphlogistine has proven of great therapeutic value as a thermic agent is best indicated by its extensive professional employment and its many advantages over the hot water bottle and other methods of application of heat is readily discernible.

Chronic Articular Rheumatism.—Edward B. Richey (*Kentucky Medical Journal*) records in detail a case of twelve years' standing treated with intravenous injections of phylacogen. The treatment began February 8th, 1912, and by end of the month patient was free from all pain, had free motion and could extend limbs several inches more than before treatment.

Occiput Posterior Positions.—F. W. Rice (*Am. Jour. Obs. and Diseases of W. and C.*) says early rupture of the membranes is the principal cause of prolonged labor in primiparæ. Relaxed pelvic floor is often a frequent cause of delayed rotation in multiparæ. The best method of delivery where the head is high in the pelvis is double application of the forceps. Where the head is floating, in a flat pelvis, version offers the best solution, if not contra-indicated. Partial rotation by the blades is the best method, where the head is low in the pelvis.

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Original Articles

ON THE MONONUCLEAR CELLS OF THE BLOOD

By O. C. Gruner, M.D., Montreal.
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Enumeration of the white cells of the blood by recording the different varieties as they pass before the observer's eye in a microscopic preparation is a well-recognized procedure in clinical microscopy. The classification usually adopted is, in its main features, that originally put forward by Ehrlich in 1891, although Arneth's[1] work was published in 1904, in which an attempt was made to demonstrate the utility of subdividing the white cells into further groups than those referred to. That this new classification has been adopted in so few centres appears to be due to the increased attention which is needed in carrying out a given differential count. Experience has nevertheless demonstrated the utility of the system in deciding on the reactive powers of a patient's tissues to different infections. Just as the great majority of cases reported in the present-day literature, in which a differential blood count has been made, give the reader extremely little information about the polymorphonuclear cells, so it is a conspicuous fact that a distinction between "small lymphocytes," "large lymphocytes" and "hyaline" cells appears to be considered a satisfactory limit in the case of the mononuclear cells. It is the main object of the present paper to show that this limitation should not be accepted as final.

Some years ago the writer endeavored to divide up the lymphocyte forms into several varieties, according to morphological characters, with the object of ascertaining if any rules lay at the root of the distribution of the different cells in the blood stream, from

which diagnostic or prognostic indications could be formulated. During the earlier years the principle was carried out by the aid of certain arbitrary symbols which were employed to represent these various forms; subsequently, however, the general recognition of Pappenheim's nomenclature[2] rendered it more convenient to replace the symbols by names which had a meaning to the hematologist. A description of the various forms familiarly labelled "lymphocytes" may serve the useful purpose of rendering a search for finer distinctions more frequent among hospital laboratory workers, and an attempt will be made to demonstrate the practical value of greater care in this direction.

The panoptic method of staining introduced by the author named[3] has also proved of so great value that it may be said to be essential that blood films should be studied by its aid in all cases. The remarks which follow depend entirely upon the application of this method of staining.

It will be convenient to discuss these cells under three headings:

(1) The source of the mononuclear cells of the blood.

(2) The special morphological characters of each cell-form.

(3) The application of these observations to routine clinical pathological work.

(1) *The different sources of the mononuclear cells of the blood stream.*

While the old problem as to whether these cells come from the lymphoid follicles or from the spleen, or from both, remains only partially solved, we find the following sources to be possible: The lymphoid follicles of the lymph nodes and of the mucous membranes; the Malpighian bodies of the spleen: the connective tissue spaces. Some of the cells may enter the blood directly; others may pass in via the thoracic duct. The wandering cells of the connective tissue spaces, whatever be their origin, may be supposed to be able to enter the blood stream eventually by passing along lymphatic channels. It is questionable whether such cells could be identified again in a blood smear. The cells of the pulp of the spleen, and those in the "pulpar" tissue of the lymph-nodes and the endothelial cells lining the blood-vascular channels are certainly able to make their way into the blood stream, either under normal or under catarrhal conditions. It may, therefore, be assumed that an attempt to identify such cells in the circulating blood might be instructive. According to Patella[4], the endothelial cells are to be recognized under the form of the familiar "large mononuclear leucocyte," but such an interpretation is not generally placed upon this form of cell.

Even though it be not possible at present to identify the lymphocyte coming from a lymph-node, that from the spleen, that from the endothelium of the capillaries of any part of the circulation, it will be the aim of the clinical pathologist to rectify this defect of knowledge so that he can recognize other lymphoid cells, including those liberated into the blood stream during the metastatic cycle of tumors. Furthermore, the recognition of abnormal or degenerating cells may prove of profound value to the clinician.

(2) *The special morphological characters of each cell-form.*

The means of identification of a cell are: size of cell compared with red blood cells; the shape; the relative proportions existing between the cell-body and the nucleus; reaction of each to staining reagents; the structure of each; the presence of nucleoli and their characters. The characters which go to indicate the age of a cell have also to be borne in mind—degree of basicity of nucleus, increasing amount of cell-body as compared with the nucleus as age advances.

The lymphocyte forms under consideration all agree in having simple nuclei and in having a basophile cell-body without a granulation visible by the use of stains in vogue previous to the Romanowsky age. The cells have had the following synonymous terms applied to them: mononuclear leucocytes, agranulocytes, spongiocytes.

(a) Small lymphocytes: This is a small round cell with a dark reddish-violet nucleus enclosed in a concentric film of non-granular pale-blue cytoplasm. Within the nucleus is a nucleolus which is eccentric in position. There are sometimes a few azure granules visible, especially at one spot. The cell is of about the size of a red blood-cell, but never larger.

(b) Leucocytoid lymphocyte: This cell resembles the preceding save that the cell-body is decidedly more conspicuous, but the nucleus is eccentric. The nucleus is not as large as in the preceding case, but the cell as a whole is larger. This cell is an older form.

(c) Lymphocyte with reniform nucleus: This cell is exactly similar to the type (a), but the nucleus shows a slight dimple on one side, the cytoplasm against which is decidedly paler in staining power.

(d) Meso-lymphocyte: The characters are similar to those of (a), but the cell is distinctly larger, though smaller than type (e). The nuclear character of dense structure and deep staining power is present here also. The markings within the nucleus are characteristic—polygonal masses drawn out at their angles into filamentous structures which join with those of their fellows.

(e) Large mononuclear leucocytes (monocytes): The cell is 2-3 times as large as (a). The cytoplasm stains feebly and has a faint retiform structure. Azure granules of small size are scattered diffusely through the cell-body. The nucleus is relatively medium in size, oval in shape, with a slightly irregular contour (lobate or indent) and a delicate nuclear structure. There are no nucleoli within it.

(f) Leucocytoid monocyte: The cell is similar to (e) save for a relatively larger cell-body.

(g) Transitional cell of Ehrlich: This form is similar to (e), but the nucleus is deeply indented, similar to that in a metamyelocyte.

(h) Juvenile monocytes: Cells with a nucleus similar to the preceding, but with a narrow cytoplasmic zone. The latter may have a lilac tint from the presence of slight oxyphilia.

(i) Juvenile lymphocytes: These forms are similar to (a), but the nucleus is void of recognizable cell-body.

(j) Dwarf lymphocytes: These correspond in all characters with type (a), but are of much smaller size. These are classed as atypical immature forms.

(k) Lymphocytes with nuclei in a state of amitotic division. It is questionable where these should be placed in the genealogical tree.

(l) Myeloic monocytes, or leucoblasts: These are presumably bone-marrow cells, which only occur in the blood in pathological conditions. The distinctive feature is the structure of the nucleus, which stains less intensely than that of an ordinary large mononuclear leucocyte, and is marked by delicate shadowy lines running at right angles to the long axis of the nucleus. The cell-body is basophile and may contain azure granules of larger size than those of (e). There is no nucleolus.

(m) Myeloic monocyte without azure granules: This form is identical with (l) save for the absence of azure granules.

(n) Leucocytoid myeloic monocyte: This form is similar to (l), but the size of the cell-body relative to the nucleus is increased.

(o) Myeloic monocyte with indented nucleus: This form is comparable with (e).

(p) Lymphoblastic macrolymphocyte: This cell is of the same size as (d), but the nucleus is relatively larger than in that form of cell, and nucleoli may be noticed. The nuclear structure differs in that the markings are similar to those of (r) intermingled with coarse flakes of chromatin of the form described under (d). This cell is pathological and represents an earlier stage in genealogy.

(q) Leucocytoid lymphoblastic macrolymphocyte: This cell has similar characters to the preceding, but the cell-body is larger.

(r) Lymphoidocyte: This form is characterized by the peculiar structure of the nucleus. The cell itself is much larger than (d) and may be larger than (l). The nucleus appears to be made up of a very fine network, whose meshes are circular in shape. The staining power is relatively feeble. There may be two or three nucleoli present which are eccentric and relatively large. There is a slight increase in the density of the chromatin structure around them. The cell-body is rather strongly basophile.

(s) Microlymphoidocyte: This cell has similar characters to the preceding, but the cell is decidedly smaller, being equal to or less than (d).

(t) Leucocytoid lymphoidocyte: This is similar to (p), but with relatively larger cytoplasmic zone.

(u) Leucocytoid microlymphoidocyte: This cell is exactly analogous to the preceding.

(v) Rieder cell: This is a lymphoidocyte whose nucleus is indented at one or more places. Its appearance is quite characteristic and is definitely pathological.

(w) Dwarf lymphoidocytes: Cells similar in type, but still smaller. Their identification and significance must remain doubtful.

(x) Lymphoid erythroblast: This belongs to the hemoglobin-bearing series, and comes to appear like a lymphocyte form because of the absence of hemoglobin. The cell-body is rather strongly basophile and contains no granules of any kind. The nucleus is relatively large, and its structure is quite characteristic—the chromatin lies towards the periphery in the form of a wheel.

(y) Plasma cells or irritation cells: These may be divided up into almost as many groups as have been already mentioned according to the form of the nucleus and the relative proportions of the cell-body. The staining reaction of the latter is always intensely basophile, and a retiform structure is always well marked in it. Vacuolar spaces may be noted among the meshes. Azure granules are not to be expected, though forms do occur in which such granules can be made out scattered through the cell-body.

Simulating these forms are the following abnormal cells:

(i) The promyelocyte, which has a basophile cell-body, but may present a few neutrophile granules. Azure granules are scanty.

(ii) Myelocytes and metamyelocytes without granules. The oxyphile reaction of the cell-body enables the cells to be placed correctly. Polynuclear leucocytes may occur in similar guise.

(iii) Leucosarcoma cells of different forms (juvenile, senile, Rieder-like). These may simulate any of the preceding types as regards nuclear characters.

Finally, indications of degenerative changes in any of the above-named cells require to be noted. The presence of vacuoles in the cell-bodies, feebleness in staining of nucleus, ill-definition of outline of the cell (indicative of cytolysis), or the presence of foreign bodies within the cells, should all be noted. The "shadow" forms were first named after Klein and Gumprecht.

The evidence afforded by the study of blood-films and of films from the various hemotopoietic tissues fully bears out the justification for Pappenheim's terminology. The introduction of such a word as "lymphoidocyte" proves a great boon when we consider the confusion that has arisen from the use of such indefinite words as "large lymphocyte" or "large mononuclear leucocyte." The term "large lymphocyte," for instance, is frequently employed in modern clinical work to represent an inhabitant of normal blood, but in technical literature the term is found to be applied to a parent cell normally residing only in the bone-marrow or other blood-forming centres. The term "monocyte," again, as applied to a definite cell-entity, has found wide application since the researches of Pappenheim and Ferrata in 1910[5] and should be widely adopted as a decided advance on previous nomenclature.

As will be readily understood, the distinction between such cells as (a) and (s), (p) and (r), (f) and (h), (l) and (m), is difficult to make out, but is possible by making a rule of first noting the nucleus and then the cell-body. Intermediate forms between the different cell series are not distinguished with enough certainty to justify a separate nomenclature.

The habitual classification of the mononuclear elements into small and large lymphocytes and hyaline cells throws together the following cell forms: The small lymphocytes include (a), (b), (c), (d), (h), (i), (j), (k), (s), (w), (x) and (iii). The large lymphocytes include (e), (l), (m), (o), (p) and (v). The hyaline cells include (b), (g), (n), (q), (u) and (v), and possibly (e), (l), (m), (o), (p) and (y).

In spite of the fact that normal blood does not contain more than (a), (b), (c), (d), (e), (f), (g)—(a) and (e) representing by far the majority—the plea is that any of the serious diseases which come into a hospital ward may furnish examples in which the other forms occur in varying number. A search for an adequate explanation for the latter finding will afford a clue to the

meaning of lymphocyte forms in their relation to immunity and infection.

(3) The application of the above data to routine clinical pathological work:

The full value to be derived from a careful study of the lymphocyte group of cells cannot be defined until the precise significance of each variety is determined. Such questions as the following arise: Is the plasma form the result of changes taking place in the blood-stream, or is it an imported cell? Do any of the cells in an inflammatory focus appear in the circulating blood under any conditions? What is the duration of life of each main type within the blood-stream? etc. On the other hand, even in the absence of such knowledge, a study of numerous careful differential counts may be expected to bring information about the relation between the various cells in question and certain morbid states. It may be noted, for instance, that in some cases of tubercle, in lymphosarcomas, and in pernicious anemia, the juvenile outweigh the older forms of lymphocyte in number.

Diurnal changes in the blood-picture.—The collection of blood at a given time of day will avoid misinterpretations of changes in the blood-picture, which are really diurnal in nature. The writer has found that the relative proportions between young and old lymphocytes vary greatly during the day. The results of such observations are conveniently recorded in the form

$$\frac{\text{sum of small and medium forms per c. mm.}}{\text{sum of large forms}} = x$$

It is found that this a-lymphoid-cell index falls from 12.6 (midnight) to 5 during the forenoon, and rises from 5 to 7.1 till 4 p.m., falling again to 3.5 at the time of the evening meal. Whether this phenomenon is constant in the same individual (or in a number of individuals) or not, it is the object of further study to decide. The observations of Frumkin[6] show that the proportions of the different cell-forms are different in healthy and diseased states. Using his figures to construct an index as suggested above, we find that in ten healthy young adults the index was not less than 3, and reaches 5 in 80 per cent. of cases. In nephritis, tuberculosis, cirrhosis of the liver, syphilis, and mediastinal sarcoma, on the other hand, the index varied from 1.3 to 1.6, while in chronic heart cases it ranged from 2 to 15. In a case of septic sore-throat with quinsy the index was 3 before operative interference and rose to 9 within five days.

A series of counts published by Houston[7] was used as a basis for calculations in this manner.* The index was less than 3 or 4 in Hodgkins' disease, lymphosarcoma (not constant), and malaria. Similarly, from a number of counts on cases of Hodgkin's disease by Bunting[8] the index was almost constantly less than 2, and in one instance was as low as 0.4.

The presence of abnormal lymphoid cells in the blood-film.—The presence of lymphoidocytes of different types would indicate some participation of the bone-marrow in the morbid process. Under this heading the question of subleukemic states would be considered. Again, the preponderance of the monocytes characteristic of malaria would be of significance in the diagnosis of certain tropical fevers (Robertson)[9]. The investigations of Paremusoff[10] demonstrate them to be of a peculiar and characteristic form, different from that of the ordinary well-known large mononuclear leucocyte.

Other Indices.—Other indices can be constructed by calculating the relations between any of two or more lymphoid cell types than those named in the "a-lymphoid-cell index." Such additional indices may be given appropriate terms, though the most satisfactory nomenclature is difficult to decide upon.

Variations of the various indices are not characteristic of any given disease. It is essential to realize that variations in differential counts represent variations of reaction to morbific agents. The blood is a transport agent and not a factory. If the proportions of material transported vary at different times they will reflect changes in supply or demand in other regions of the body. It does not follow that these changes are peculiar to one or other disease to the exclusion of all others.

Should a certain agent act chiefly or entirely on the myeloid tissues, an absence of abnormal mononuclear types would be anticipated; on the other hand, the presence of such types would be indicative of changes in lymphadenoid tissues, regardless of evidence or not of associated leucoblastic reaction in the marrow. The careful weighing-up of the total figures presented by each type of cell, as well as of the relative figures between them and the granular cells, is bound to furnish valuable conclusions for the guidance of diagnosis, prognosis or treatment.

*There is some uncertainty as to the correct position of the lymphoid cell forms in these counts, because of lack of data for cytological diagnosis.

References.

(1) Arneth, *Deutsche med. Wochenschr.*, 1904.
(2) Pappenheim, *Fol. haem.*, XII., i., p. 26.
(3) Pappenheim, *Medizin. Klinik*, 1908, 32.
(4) Patella, *Gaz. degl. osped.*, 1911, 94.
(5) Pappenheim and Ferrata, *Fol. haem.*, X., p. 78.
(6) Frumkin, *Fol. haem.*, XII., 1, p. 50.
(7) Houston, *Brit. Med. Journal*, 1904, Sept. 10.
(8) Bunting, *Johns Hop. Hosp. Bull.*, Oct., 1911.
(9) Robertson, *Indian Med. Gazette*, 1911, p. 161.
(10) Paremusoff, *Fol. haem.*, XII., p. 236.

A MEDICAL SERMON—DE REBUS

By James S. Sprague, M.D., Perth, Ont.
Examiner Materia Medica, etc., College of Physicians and Surgeons, 1903-7.

"Nothing extenuate nor set down aught in malice."

It is said Tertullian's every word was a sentence and his every sentence was a sermon. In this it is the intention to name fifty or more interests more or less in unison which, separately, afford texts capable of much expansion, and all ethical; fully believing you, my brother, if learned and in love with our profession, will find herein much diversified delight; if you are, as many are, in possession of indolence that is warping your usefulness and very life, herein is a brief solace for you; but to the uninformed and indifferent, yet seekers of truth and ideals, much encouragement, cheer and a refuge, if you can be aroused.

It is well and warrantly becoming for us to believe that our lives are more influenced by ideals than by ideas, and that more to examples, and less to precepts, our movements to higher studies are directed. It, too, is a duty, and one very obligatory, that you and I follow the teachings of Bacon, who tells us: "I do hold every man a debtor to his profession from the which as men of course do seek to receive countenance and profit, as they of duty to endeavor themselves by way of amends, to be a help and ornament thereto," and if you and I fully endorse these words, can we say: "These words do not refer to me or to us?" I leave this

simple query for you to solve or to answer in your quiet hours, for your own and true answer after careful retrospect of your doings in the profession, for you either honored it or disgraced it, or have been a neutral.

When I find that of my fellow-graduates in medicine—more than forty-three years since—more than one-half the number are dead: that but few continued in practice and relied on it through life; that several died through excessive stimulation that "stingeth like an adder," and, too, that those engaged in politics were under the fatal delusion that medicine was not a jealous mistress, it appears no wonder that our temples contain no records—save the fact that *they lived*—and *they died*, for they said no word of cheer: they told nothing of their successes, or failures, and few of them experienced the fulness of the great and national movements, interests and prospects, and in the belief that this is the age of "reason in religion and reason in medicine," and though our foundations are well established, yet the most pernicious cults, even encouraged by the church and upheld by the indifferents, the weaklings, the ignorant and unthinking among our legislators, are seeking recognition of their baseless cults in this, our province—the most enlightened in our Dominion—especially in this our native province—the burial place of our fathers and mothers for several generations.

This prologue will suffice, and as all sermons have a wide range and depart very much from the text, it, too, will serve as *apologia pro mea et verba aliorum*.

Mr. John S. Collins, 253 Broadway, New York, some few years since sent to me "Mrs. O'Malley's Advice to Her Son Upon Receiving His Diploma." When the doctor received his diploma he said his mother advised him always to look after the poor, saying in quaint Irish humor: "If health was a thing money could buy, the rich would all live and the poor would all die." It may be said and very truthfully, that every God-fearing and intelligent mother has prayed her hopeful son should be either a minister of Christ or a doctor—but no prayer that he become a lawyer. No!

"So you are a doctor, with papers to show:
Of your great deeds in medicine the world will soon know.
All our pains and our aches now like magic will go,
From the top of our head to the tip of our toe.
Now, don't be like Dinny, your brother, who has taken to law:
All the big words he used would break a man's jaw.
He argues to-day that black must be white,

And to-morrow he swears it's as black as the night.
Sure the Divil himself couldn't argue with Dinny;
Only last night he told me the judge was a ninny,
And the jurors themselves hadn't brains for to see
That all their great talking was only for fee.
Now the ladies will call on you morning and night,
Whenever they get the least bit of fright.
Saying, 'If the doctor is in, I would see him, if you please,
For I'm after contracting a painful disease.'
Then you'll run to the cupboard and take out your pills
And say, 'My dear madam, they are good for all ills;
Take one in the morning and one in the night,
And in forty-eight hours you'll be feeling all right.'
With a smile on her face and your fee in your hand,
You'll take it by saying, 'I'm at your command.'
And be at her command, if she has only a smile,
For healing the sick is always worth while.
Don't bother too much about getting your fee,
For to-morrow the Lord only knows where you'll be,
For if health was a thing that money could buy,
Sure, the rich would all live and the poor would all die."

It is well that we console ourselves with the words of Horace, who in his Carm. IV. 4-33 tells us the effects of culture: "*Doctrina sed vim promovit insitam, rectique cultus pectora roborant.*"

In the Canons of Ethics of the American Bar Association, George Sharswood writes: "There is certainly, without any exception, no profession in which so many temptations beset the path to swerve from the line of strict integrity, in which so many delicate and different questions of duty are continually arising. There are pitfalls and man-traps at every step, and mere youth at the very outset of his career needs often the prudence and self-denial as well as the moral courage which belong commonly to riper years. High moral principle is the only safe guide, the only torch to light his way amidst darkness and destruction." The high moral principle torch is very seldom lighted; if so, it is justly considered as a mask, for "nowadays a religious lawyer is regarded with wonder and suspicion." Yes, the same accusation in a few instances may be applied, justly or unjustly, yet rarely, to a few widely scattered ones in our ranks.

There are those—and many they are—in whom we trust, and are compelled by law to trust in legal interests, and it is often a query whether to term them *barristers* or *barrators*. Yes, there are

other than sea pirates, and under commission, who are in our midst, and of whom someone had in consideration when he thought of money sluggers and fee exacters. His soliloquy is:

"Full many rogues have honest faces,
And lightly trip their Sunday paces:
But yet these pious broadcloth types
Full oft should wear a garb of stripes,
And, heavy fettered, trip as well
The lock-step to a prison cell."

There are too many of whom it can be well said: "Gentler pirates never scuttled ships" or more stealthily threw the grappling irons around our money-bags, or flashed false lights to treacherous shoals, or sang more alluring songs than the sirens, daughters of the river-god Achelous.

'Be not the first by whom the new is tried,
Nor yet the last to lay the old aside,'

A few extracts from "Law and Medicine" by Mr. Justice William Renwick Riddell may be presented, which, although unchallenged and apparently accepted, save by Dr. Clark of Toronto, have statements which reflect no merit or advantage in experience and research: "But while our law is thus in a state of flux, it must not be forgotten that immensely the greater portion of it is in principle the same as it has been for centuries. While in medicine, in not one case out of twenty, can a physician gain any practical advantage by consulting an authority twenty years old, in law there is not one case in twenty in which authorities much more than twenty years will, or may not be—if not conclusive, at least of advantage. A physician who has been in practice twenty years will have twenty times as much to unlearn as his brother of the same age in the legal profession. The former must be, but with the latter '*novum et ad hanc diem non auditum*' is anathema as Cicero, one of the greatest of his tribe; and his rule must be 'what is new is seldom true, and what is true is seldom new.'

Immer etwas Neues, selten etwas Gutes."

Cicero in *De Senectate* did say: "*Disce a experientia quoniam qui in viam errabant—qui eruditi sunt.*"

In some, and a few most worthy respects

"Outworn ideals are fading fast away,
Beyond its buried past the world has ranged,
And new influences shape its trend to-day."

However, it is well for us, many of us, to comfort ourselves with the prophet's words: "Thus saith the Lord, Stand ye in the ways, and see, and ask for the old paths where is the good way, and walk therein, and ye shall find rest for your souls."—Jer. vi., 16.

It may be justly mentioned that Justinian in his Pandicts and Institutes or Code, formulated decisions from the Roman law, and from his time as Emperor of Constantinople, one thousand and more years and B.C. the great Hippocrates—*Princeps Medicorum—Auxiliator Maximus Aegris*, who was born at Cos, was the disciple of Heraclites and Democritus, and his researches were the full principles of the Baconian philosophy. It may be said that his treatment of acute diseases may be instanced as being so complete that the experience of more than two thousand years has scarcely improved upon it. Celsus, a contemporary of Trajan, in his treatment of phthisis pulmonalis advised his patient to flee to highest mountains, there to live, and his nourishment to be the fruit of the cow. The query is, has medical science done other than adopt this treatment?

Plato's year but repeats itself in due season, and the thoughts we are thinking on life's serious problems our fathers have thought. Our literature without that of before the Saviour of men would be sterile, and what is extant has formed the basis of our modern classics and inspirations.

The present time is sufficient for our labors, however. Cicero tells us *tria esse omnino genera quae in disceptionem cadera possint; quid fiat, factum, futurumve sit*," that is: the past, the present and the future of all considerations should, if worthy, occupy our studies. However, let us, with Hesiod, a contemporary with Homer, but study our future and keep in memory his wise instruction: "That man's with wisdom duly blest, who of himself can judge what's best, and scan with penetrating eye what's had in dark futurity." The church, law, and medicine are the conservators, have been and ever will be of our civilization, and without a highly educated number it will cease and heavens will peal their last thunders to mark the end of time, and it is our hope that the old saying, "That a three-fold cord is seldom broken," will apply until time shall cease and be no more, and the trinity ever exist.

Yet, why this dissertation?—for it is only imagination rears imperishable monuments; for the gods will ever return and forever

will remain—and the Divine cannot be razed in the Church, in Law or in Medicine, and if united, we stand, and if divided, we fall.

The pages of *Religio Medici* tell me, what time has forcibly told me, that "it is better to sit down in a modest ignorance and rest contented with the natural blessings of our own reasons than buy the uncertain knowledge of thy life with sweat and vexation which death gives every fool gratis, and is an accessory to our own glorification."

In the words of Horace: "*Jam satis est, verbum non amplius addam.*" and with this belief:

"*Optimi consiliarii mortui.*"

Soliloquium.

It may be advisable in medicine, as in religion—in these days of very bewildering and unsettled questions under that designation falsely termed "higher criticism"—to console ourselves, and very wisely too, with the thought that there is "more wisdom in doubt than in half the creeds," which because they for centuries have been invariable, displace our reason with entanglements, and falsely claim divine origin; but for which selfish and ungodlike aims and ends too often are sought. If Bishop Whately did say of us: "*Ubi tres medici, ibi duo atthei,*" yet the daily prayer of every M.D. is this, and which moves his soul:

"Live I, so live I,
To my Lord heartily,
To my prince faithfully,
To my neighbor honestly;
Die I, so die I,"

said Longfellow.

METHOD OF THE STUDY OF DIRECT OR SPECIFIC DRUG ACTION

By Finley Ellingwood, M.D., Chicago, Illinois.
Editor Ellingwood's *Therapeutist*.

In a recent number of this journal, an article of mine was published in which I called the attention of the readers to the importance of the study of the Materia Medica and Therapeutics, and to some faults, in my opinion, in the present method of study, and I undertook to urge upon the readers the necessity of studying *each individual remedy*, with reference to *its most direct action* upon exact conditions of disease.

It is plain to any reader that if we prescribe the proprietary preparations, or the manufactured pharmaceutical compounds that are being put out more and more extensively every year, we can never know what the individual drugs will do, and the darkness and doubt that have settled down upon the knowledge of the exact action of drugs, will be intensified.

In the study of drug action each remedy must positively be studied alone, but in order that we know to what exact condition we may apply a remedy, we must begin our study with an analytical examination of each disease, in the patient under consideration, in order that we may determine the conditions that we have to contend with in that patient. By so doing we thus familiarize ourselves with these conditions, and we become enabled to recognize them whenever we find them, as we will find that they may occur in given diseases other than the one under consideration.

Determining then, in each case the exact conditions present, we apply to one or two of each of the leading conditions a single remedy which will meet each condition and correct the disorder. Many years' close observation has convinced us, that in each remedy there is an inherent and very definite medicinal influence, which produces a corrective effect upon some given condition of disease, and, influencing that condition at one time, we find that whenever so administered, and whatever the general disease in which the condition is found, it will exercise the same influence. This certainly is the study of the exact adaptation of each remedy to certain specific conditions of disease, and when we have these conditions and a remedy that can be relied upon for this specific action whenever that action is demanded, we define the remedy

as specific in that action—specific to that given condition. *This is the most direct action of a drug possible to obtain.*

There is no more fascinating study—nothing that offers greater attraction nor more beneficial results to the sudent than this study of the direct action of drugs on exact conditions, and as first stated it will be at once seen that no other method of study can be depended upon to be so absolutely accurate.

This study opens up an enormous field. It is not necessary that we study many hundred remedies, but by taking the conditions with one or two of the remedies that will directly influence them, when the field of the diseased conditions is covered, we can take these remedies and by a thorough, persistent and careful study of the facts concerning their action, we may equip ourselves with sufficient remedies to combat all diseases in a positive and most reliable manner.

To illustrate the exact conditions in which certain remedies act, or to which drugs must be applied, I would call attention to the fact that in acute disease we find in one patient with a high temperature that the tongue and mucous membranes of the mouth are red, or deep red, that the tongue is elongated and thin and covered with a dark coat, while with the same temperature in the same disease with another patient, the mucous membranes and tongue are pale, the tongue is coated with a pasty white coat, with a dirty grayish or yellow centre.

If we were to say hydrochloric acid was a good remedy for such a disease and would give that remedy in both cases, the latter condition would be most seriously increased and intensified, and the temperature would increase, and be very difficult to control, while in the former case the whole train of symptoms would yield in a most satisfactory manner to that one remedy.

The reason for this is that in the former named condition there is a deficiency of the acids in the system, there is an inefficient secretion of acids in the gastro-intestinal tract, and acids are positively demanded. In the latter case the acids are all in excess, and not alone must neutralization be effected, but it is necessary to administer alkaline remedies often to go back of the simple neutralization of the acids, and to create in the system a larger output of the alkaline elements.

This one illustration may be applied, as follows, whatever the acute febrile condition present, after determining the temperature we must determine whether the course of treatment should be alkaline in character or acid, and this condition must be kept in mind until corrected, administering other remedies as

indicated. Take for instance an extreme typhoid case with mucous membranes dark, mouth and tongue dry, perhaps sordes on the teeth. We will presume this patient to have delirium, low muttering, stupor increasing to coma. If we were to give an alkaline remedy in this case with sodium or potassium bromide, the stupor would increase; the deficiency in secretion would be intensified, and the entire group of symptoms would be rendered still more difficult of control. By administering to that patient a non-alkaline or neutral or acid laxative if needed, with hydrobromic acid in fifteen minim doses every two hours, with perhaps ten or twelve drops of ergot to relieve the cerebral congestion, the change that would take place for good would be so marked and rapid as to be at times almost astonishing, as the acids are needed positively. Yet these conditions are seldom considered.

We might go on from this and mention very many conditions that can be met with a single remedy, that usually have no attention whatever in the treatment of disease in general, and yet if the detail remedy was applied to the exact conditions, the symptoms would abate, the threatening factors would be removed, and the temperature would drop in febrile diseases, and the whole disease would take on a more favorable aspect.

For the further consideration of the readers, in this line at this time I will present only the *condition of pain*, with some of the exact conditions under which pain is found, and as relieved by that particular remedy which experience has proven us is specifically adapted to that exact condition of pain. In a future article in this journal I hope to bring out some specific remedies with the exact adaptations of these remedies in a way that will show the beauty of this method of drug study.

To be brief, but yet definite, supraorbital pain, unilateral or bilateral, acute and sharp, from acute cold, is controlled often by a single dose of fifteen grains of sodium salicylate. This pain is also controlled by five drops of specific gelsemium, one or two doses, an hour apart.

Muscular pains—general aching—pains in the muscles as if bruised—as if overworked—indicate macrotys. From one-half drop to five drops of a good fluid extract may be given every hour or two; the smaller doses in sensitive patients, the large doses in full plethoric cases. The action of macrotys is enhanced by sufficient doses of aconite if there be any elevation of the temperature.

The above condition is also relieved by twenty drops of arnica in a four ounce mixture, a teaspoonful every hour, especially if

the soreness, bruised condition or aching is due to actual muscular strain or overwork, as in labor.

For muscular pains as above, caused by exposure to cold, with local or general aching, give sodium salicylate, from five to fifteen grains every two hours.

For muscular pains in the deep muscles of the neck or back, acute, as in tic, or lumbago, give gelsemium, from two to five drops, combined with macrotys, every hour or two. Muscular soreness or pain in the deep muscles from cold is materially benefited by applications of dry heat, often effected by ironing the part over flannel with a hot flat iron, or the applications of a rubber water bag, hot. This assists the indicated medicines.

For pain in the face, neuralgic in character, with nervous irritation, give gelsemium, from one to five drops every hour or two; especially effective if the skin be warm, the eyes bright and pupils contracted.

Pain in the face, neck or shoulders; sharp, persistent, patient chilly, skin and extremities cool or cold—belladonna, one or two drops of the tincture every hour. This influence is materially enhanced by from two to five grains of ammonium chloride, or one-half grain of camphor with each dose of belladonna in persistent neuralgia of the head or upper extremities.

Shooting pain under the right shoulder blade, as from the liver, with dull ache in the shoulders and across the back—sticta, twenty drops in four ounces of water, a teaspoonful every hour.

Pain through the lungs, or in the pleura; acute, cutting; increased by motion or by deep breathing—bryonia, twenty drops; water, four ounces; a teaspoonful every hour with adults; in smaller proportion, half a teaspoonful every half hour with infants.

The pain of acute pleurisy, very severe, sometimes agonizing, should be at once relieved by a large, efficient hot mustard poultice, applied short of blistering, for from four to eight minutes. This relieves until the effect of bryonia is apparent, which requires a little time.

In acute pleuritic pains, asclepits, in from five to thirty drops every two hours, acts very similarly to bryonia, and, when exactly indicated, this remedy is as reliable.

For pain in the heart—angina pectoris—give a hypodermic of lobelia from twenty to forty drops. Relief is usually immediate from one dose. The same dose may be repeated, however, in one or two hours if relief is not complete.

Angina is relieved also by macrotys in from two to five drop doses every hour or two; also by gelsemium in from five to ten

drop doses where there is nervous excitability. The two latter remedies are indicated especially if there be a rheumatic diathesis.

For pain in the heart, persistently recurrent, not severe but distressing—give cactus, from one to two drops, five or six times a day. If muscular soreness be present in the chest, shoulders and left arm, combine with macrotys.

Pain in the stomach, acute from indigestion, give a mild but efficient emetic—a teaspoonful of mustard in a quart of warm water—to induce vomiting, or sufficient ipecac, with a large quantity of warm water, to induce vomiting. In many cases the warm water alone will be sufficient to wash out the stomach. Treat subactute pain then, if any, as then indicated.

Pain in the stomach after each meal from indigestion; give a digestive always while the food is taken. Pawpaw in some form covers most of these cases. Institute general treatment for the restoration of the normal action of the stomach.

Pain from indigestion, from deficient hydrochloric acid, give hydrochloric acid in water, with from five to ten drops of fluid hydrastis. Exercise extreme care as to food in these cases. In fact in the acute cases a period of fasting is essential.

Pain in the stomach, with extreme acidity—tongue broad, pale and thick, coated white; one-half of a teaspoonful of bicarbonate of soda in half of a glass of water will often at once control the pain, but continued treatment to neutralize excess of acidity and to change the habit of the system must be instituted. When this condition is present at the beginning of any acute disease, it must be overcome first, or the specific action of the other remedies will be interfered with.

Pain in the stomach, severe, agonizing, spasmodic—give twenty drops of dioscorea in half of a cupful of hot water, drunk at once.

Pain always after eating, with extreme gastric acidity, probably due to gastric ulcer—avoid solid food, neutralize acidity if indicated, give from ten to fifteen drops of geranium every two hours. Flush the colon, and in emaciated cases resort to rectal feeding for a few days. Milk of bismuth, or a solution of calcined magnesium in regular sufficient doses, will assist in the neutralization of the acidity.

Pain in the stomach walls, diffused tenderness on pressure, the pain acute or slightly cutting, not influenced by food;—tenderness, persistent and aggravating—give bryonia, twenty drops;

water, four ounces; a teaspoonful every hour or two. May apply a hot solution of magnesium sulphate externally.

Pain in the region of the liver, mildly acute, little shooting pains, no great disturbance, tenderness on pressure or by motion —give bryonia as above. Violent, agonizing pain in the liver, probably from gall stones, or the pain known as bilious colic, give half of a teaspoonful of dioscorea in a cupful of hot water, repeated in from twenty to forty minutes. If not from obstructive causes, this will control the pain. If the pain is not affected by the second dose, institute other measures as the administration of half of a dram of hypodermic lobelia.

Pain within the abdomen, diffused, with soreness on pressure; pains shifting, small, acute and cutting—apply heat and give bryonia persistently, as if peritonitis were present.

Pain in the abdomen, extreme, cause indeterminate, difficult to locate, griping in character, very severe—give hypodermic of lobelia. This should relieve promptly. If it recurs after a short period repeat the dose.

Pain in the abdomen radiating toward the umbilicus—nux vomica, twenty drops; water, four ounces; a teaspoonful every half hour or hour.

Colic pains in infants, no apparent disturbance otherwise—lobelia, five drops; water, two ounces, a teaspoonful every ten minutes. Colic in infants, with mild diarrhea or greenish particles with the feces, colocynth tincture, five drops; water, two ounces; half of a teaspoonful every five to ten minutes. A few doses will usually relieve.

Colic in infants, with more protracted diarrhea, greenish discharges, discharges induced by taking food—tincture of chamomile, ten drops; water, two ounces; a teaspoonful every hour.

Colic in infants, with large, watery, bowel movements, exhausting in character; skin inclined to be cool, patient feeble—arsenite of copper, one or two one-one hundredth grain tablets in four ounces of water; a teaspoonful every ten minutes. The effect of this remedy is very reliable and prompt.

Pain in the liver of a very tensive character, dull, persistent, dragging—chelidonium, one to two drams; water, four ounces; a teaspoonful every two hours. If accompanied with tenderness on pressure add bryonia. If there be shooting pains under the right shoulder blade also, add stieta. Chionanthus is especially indicated if jaundice be present, with or without pain.

Pain in the kidneys, dull, dragging, constant, with backache and soreness through the muscles of the lumbar region—gelsemium and macrotys, from two to five drops of each, every hour or two, with hot applications.

Persistent backache from the kidneys, the urine of high specific gravity, give these same remedies as above, with ten drops of hydrangea at each dose.

Kidney colic from the passage of stone—give a full hypodermic of lobelia, repeated if necessary, without fail, two or three times an hour apart.

For bearing down or dragging pains in the lower hypogastrium—give helionias, two to four drams; water, four ounces; a teaspoonful every two hours.

Painful menstruation, skin cold, patient chilly, extremities cold, pain at the beginning of the flow or just before—belladonna in full doses; patient in a hot bath (with much care as to length of time). To equalize the circulation is a desirable thing. If the pains are spasmodic, with cold skin, as above, give hypodermic injections of lobelia. The tendency to this should be overcome by proper intramenstrual medication.

For pain in the urethra on urinating, if following labor, give hydrangea, a dram in four ounces of water, a teaspoonful every hour. If accompanied with cystitis, in mild cases give gelsemium and macrotys, one or two drops of each every two hours. If with chronic cystitis in the aged, severe, give thuja, eight drops; chimaphila, ten drops; in a teaspoonful of water every two hours.

Pain with chronic cystitis in the aged, the urine very irritating, alkaline in reaction, giving off an ammoniacal odor—dissolve four grains of benzoic acid and six grains of borate of sodium in half an ounce of cinnamon water, and give this as a dose every two hours. The effect is almost immediate and highly satisfactory.

Pain from spasmodic contraction of the urethra, acute, severe—give five to ten drops of gelsemium; repeat in an hour, or inject a dram of specific lobelia deep in the urethra, allowing it to remain a short time.

Pain in general should be relieved by a hypodermic of morphine after injury or after severe burns when the pain is likely to induce shock.

Pain or any distress after surgical operations can often be relieved without inducing any discomfort or other unpleasant conditions, often controlling the post-anesthetic vomiting, by using the following simple combinations:

℞

Morphine . . . . . grain 1.
Sodium or strontium bromide. . . . . drams 1½ to 2.
Tr. hyoscyamus . . . . . drops 10 to 20.
Tr. capsicum . . . . . drops 5 to 10.
Syrup of tolu or simple elixir q.s. . . . . ounces 2.

M. Sig.—A teaspoonful every fifteen to twenty minutes to effect.

I think this combination acts very similarly to very small repeated doses of H.M.C. I used it twenty years before H.M.C. was suggested, and have recommended it in hundreds of cases, and its influence is highly satisfactory, as it is difficult to get too much of a morphine influence or any other unpleasant effect upon the stomach. Those who cannot otherwise take morphine can take it with only goodly results in this combination.

General pain or local pain, either of uncertain cause, is greatly benefited by hot applications, if the surfaces are cold and the temperature of the body is low. This should always be borne in mind. Intense and persisted heat will not only help restore normal conditions and relieve pain, but will prevent its recurrence.

Acute Poliomyelitis.

According to Dr. Schreiben (French correspondence, *Medical Press and Circular*) the prophylactic treatment consists in isolation of all contaminated patients; and in times of epidemic, every person in touch with the patient should be isolated. As the olfactive mucous membrane is loaded with the medullo virus, this region should be disinfected by the introduction into each naris of a pomade such as:—Solol, ½ dr.; menthol, 5 grs.; vaseline, 1 oz. Rest in bed, quinine for fever, aspirin or salicylate of soda for pain, calomel, and hot baths. In the meningitic form, lumbar puncture may be useful. When the case enters on the period of repression, vicious attitudes must be corrected, and massage—at first very light rubbing—as the muscles are often sensitive; later on heavier pressure, the muscles completely relaxed by flexion. Gymnastic movements are good against ankylosis and muscular atony. Later the galvanic current will often be found useful, the negative pole being moved over the different paralyzed muscles. General treatment salt baths, friction, and general tonics.

CONGENITAL ABSENCE OF THE FEMUR: REPORT OF FIVE CASES

B. E. McKenzie, B.A., M.D., Toronto.

Bone defect, or actual absence of an entire bone, or of bones, at birth, is not very uncommon. Because the condition greatly disables the patient in some instances it is one of great importance. The etiology is shrouded in mystery. Nothing satisfactory by way of explanation is known to the writer. Four causes have been assigned with more or less coloring of satisfaction.

1. Maternal impressions.
2. Intra-uterine constriction by uterine bands, or from the cord.
3. Local arterial disease; or
4. Some deficiency in the germ.

From the point of view of a practical or clinical paper these may be passed without comment. Of the various long bones the radius is most frequently absent. Next in order of frequency are the fibula, tibia, ulna, femur and humerus.

Hoffa, in his *Orthopadische Chirurgie*, published 1894, found of the radius, 53; of the fibula, 45; of the tibia, 38; of the ulna, 6, cases. He makes no mention of the congenital absence of the humerus or femur. Other writers on orthopedic surgery make but slight reference to the subject, the literature being found only in scattered articles in medical journals. In the *New York Medical Journal* of Feb. 20th, 1897, the writer published the reports of ten cases (with dissections) comprising absence of the following bones—radius, ulna, tibia, fibula, ribs and metacarpal bones. At that time he had not seen any cases of absence of the femur.

In such cases treatment naturally falls to the lot of the orthopedic surgeon. The fact, which is generally true, is manifest here, that very little relatively can be done to benefit the upper extremity by surgical intervention, but the lower is quite amenable to treatment.

When the defect in the upper extremity is such as to greatly disable a member it is possible in some instances for art to improve the condition, but seeing that the kind of action called for pertains to the finer and more delicate movements, artificial aids must be disappointing. In the lower extremity, however, a useful member in most cases can be secured by the aid of prothetic appliances.

When the fibula is only defective and not entirely absent it is commonly the lower part which is lacking, the leg thus failing to have its outer guard—the external malleolus—to keep the foot upright in its place. This lack is readily supplied by a simple boot and brace.

When only the lower portion of the tibia is lacking the knee joint is likely to be normal or nearly so. In these cases the deformed foot may be brought to a normal position and a boot and brace made to supplement the defective limb. If the entire tibia be absent the disability is much greater. It will be recalled that of the tibia and fibula the former only takes part in the formation of the knee joint; hence, in its absence there is no knee joint proper. In such cases the femur has a poorly developed lower extremity, so that sometimes instead of the well expanded articular surface made up of the condyles it terminates in a pointed extremity. If the end of the femur presents a fairly expanded surface the upper end of the fibula may be removed from its position, and either the ends of the bones may be excised and by synostosis a continuous bone from hip to ankle be substituted or by implantation the fibula may be brought into line with the femur. If now by correction of the deformity of the foot and the fibula, a correct alignment can be secured, and whatever lack there is be supplied by a brace, it is surprising how greatly the parts will develop so as to assume a function approaching the normal.

When the tibia is entirely absent, however, the remaining parts are usually so defective as to render inefficient any effort to secure a weight-bearing extremity. In such a case it is better to remove by amputation the portion below the femur and permit art to supply the lack.

The femur may be altogether absent; commonly there is a vestige intervening between the acetabulum and the tibia. In such cases the gluteal and thigh muscles are bunched so as to present the appearance of a ball. If a portion of the femur be present it is directed nearly horizontally outward from the acetabulum and is not well under muscular control; there are two joints instead of one in the immediate vicinity of the pelvis and when the limb assumes the weight of the body there is a yielding similar to that seen in congenital dislocation of the hip. Owing to this fact a prothetic appliance should be brought well under the ischium so as to carry the body weight more securely.

In one of the cases shown here, not only is the femur absent, but the fibula also. The radiograph shows a rudimental bone above the

end of the tibia, which is probably a vestige of the femur and after further development it will probably establish a more intimate relationship with the acetabulum. In this case, although the fibula is absent the foot is complete in all its parts, but is strongly abducted, so that if weight be borne upon it the inner border of the foot is brought into contact with the ground.

In such cases a prothetic appliance can readily be made so as to render walking quite comfortable, and such as to avoid any very noticeable limp. In the case of children where growth is pretty rapid and where it is necessary to avoid any considerable expense a Thomas knee brace can be employed to meet all the requirements. The boy whose condition and brace is mentioned here learned to walk very readily almost immediately after putting the appliance on. In the case of an adult where appearance is of greater importance and where growth does not render necessary so frequent a change of the appliance, an artificial limb can readily be adapted to the defective portion. The foot can be so directed as to bring its long axis into line with the tibia and the socket which is made in the artificial limb can be exactly adapted to the shape of the foot so that the heel in this position can bear a very considerable portion of the weight. If, in addition to this weight-bearing point, the ring of a Thomas brace comes into fairly close apposition with the tuberischii the weight of the body is very efficiently borne.

Two of the cases seen were in young infants and before the time when I could secure satisfactory radiographs. One is a boy of five years. A fourth was a boy about eight years of age whose condition was very similar to No. 3 and was treated in a similar manner. The fifth here referred to is that of a young man about twenty-five years of age, for whom an appliance was made which enables him to stand and walk without a limp which attracts much attention.

PNEUMONIA.

James Mitchell (*Medical Record*) treats pneumonia as follows, rest, support, and calcium chloride. With equal parts of milk and lime water, he gives 10 grains of calcium chloride every three hours.

THERAPEUTIC NOTES

Phosphaturia.

Umber (*Therapie des Gegen.*) says that in the majority of patients suffering from phosphaturia, that hyperchlorhydria is present with general neurasthenia. Atropine has a pronounced action in increasing the acidity of the urine, and thus keeping the phosphates in solution. It reduces the elimination of the calcium. He orders foods as free from lime as possible. The dose is from 10 to 20 drops of a 1 per thousand aqueous solution of atropine sulphate after meals. This maximum dose he keeps up for two weeks, then gradually reducing it. The course of treatment extends over three or four weeks.

Gastric Flatulence.

Prof. A. Hirschler (Hungary correspondence *Medical Press and Circular*) recommends the following for severe gastric flatulence, the treatment consisting in antiseptics, absorbent powders and laxatives:—Peroxide of manganese, 6 grs. For one wafer; to be taken half an hour after meals. After the repast:—Prepared chalk, 15 grs.; carbonate of soda, 8 grs.; calcined magnesia, 8 grs. For one powder; to be taken in water or aniseed tea. In case of pain or burning in the stomach, opium and belladonna might be associated with the powders:—Prepared chalk of bismuth, 15 grs.; calcined magnesia, 12 grs.; powdered opium, 1-5 gr.; powdered belladonna, ½ gr.

Tonsillitis.

A. E. Buchanan (Medical Council) has had good success in the treatment of tonsillitis with the following prescription:—Sodii salicylatis, grs. 10 to 15; tincture ferri chloridi, gtt., 10; glycerini, gtt., 15; aquæ, q. s., ad oz. 1, M. Sig. One such dose every two to four hours. To this he adds now one or two drachms of bicarbonate of potash, which gives a better color and enhances its medicinal value. Patients first drink half a tumbler of water, then the iron mixture, allowing the medicine to coat over the throat and remain there as a topical application, as well as an internal treatment. He also uses aspirin as a topical application, carefully applied on a swab.

Reviews

Infant Feeding. By Clifford G. Grulee, A.M., M.D., Assistant Professor of Pediatrics at Rush Medical College; Attending Pediatrician to Cook County Hospital. Octavo of 295 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1912. Cloth, $3.00 net. Sole Canadian Agents: The J. F. Hartz Co., Ltd., Toronto.

One can quite agree with the author of this book that in combating infant mortality by infant feeding the most simple laws are the best, that each child is a law unto itself, and that the education of mothers is essential. The problem of proper infant feeding is apparently a great one when it takes a book of 295 pages to set it forth, and the physician must realize what he has got to know in order to be able to boil it down for adaptation to each individual case. There are chapters relating to the anatomy and physiology of the gastro-intestinal tract, the metabolism of the infant, the bacteriological flora, breast feeding, artificial feeding in health and gastro-intestinal disturbances and nutrition in other than these disturbances. In the book the scientific and the practical are combined.

Laboratory Methods. With Special Reference to the Needs of the General Practitioner. By B. G. R. Williams, M.D., assisted by E. G. C. Williams, M.D., with an introduction by Victor C. Vaughan, M.D. Illustrated with forty-three engravings. St. Louis: C. V. Mosby Co.

A book on laboratory methods for the general practitioner, dedicated to the general practitioner and stamped with the approval of Victor C. Vaughan scarcely needs commendation from the medical press.

An examination of this book, however, leads us to recommend it highly to our readers. It is neither an elaborate encyclopedia nor a concise and limited compend. It strikes rather the happy medium of full practicability. Men in general work will find it just what they require for doing their work in a small, well-equipped home labora-

tory. There are excellent chapters on simple water analyses, every-day stool tests and laboratory prophylaxis, while that on private post-mortems is well worth the price of the book alone. It is a volume of 204 pages.

An Essay on Hashish. Including Observations and Experiments. By Victor Robinson, Contributing Editor *Medical Review of Reviews*, etc., Price, 50 cents. New York: *Medical Review of Reviews.*

This little volume of 83 pages shows painstaking labor and research on the history, pharmacology and therapeutics of *cannabis indica.* Dr. Robinson's experiments and observations upon friends and himself are interestingly told. He does not tell us, however, why he gave thirty and forty minims to his friends, but only took twenty himself. Possibly he anticipated the more joyful delights of the smaller dose.

Sexual Impotence. By Victor G. Vecki, M.D., Consulting Genito-Urinary Surgeon to the Mount Zion Hospital, San Francisco. Fourth Edition. Philadelphia and London: W. B. Saunders Co. Canadian Agents: The J. F. Hartz Company.

The ever-increasing interest manifested by the profession in the study of the normal functions and pathological conditions of the sexual organs necessitates the re-appearance at prompt intervals of the newest theories and ideas in regard thereto. Hence the present edition of this good book is timely. The book goes closely into the forms of impotence, diagnosis, prophylaxis and treatment.

Dominion Medical Monthly

And Ontario Medical Journal

EDITED BY

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COMMENT FROM MONTH TO MONTH.

Osteopathy was a subject dealt with in a comprehensive manner by Dr. Bruce, President of the Ontario Medical Association, in his address which we published in full in our July issue. It is quite true to assert that his remarks concerning osteopaths and osteopathy in Ontario will be endorsed by the medical fraternity.

Embodying the views of the medical profession as they do, they should command respect from the Legislature and should carry great weight with that body.

The representatives of the people put the Ontario Medical Act upon the statute books in the interests of the public, but failed to define the practice of medicine. This error will be sure to be remedied when the subject comes before the Legislature for final adjustment.

At the last session, Dr. Jamieson introduced a bill which apparently has been misunderstood by many members of the medical profession, and as it was being promoted by the Ontario Medical Council, that body came in for criticism, as it was believed they wished to license the osteopaths already practising irregularly and contrary to the law of the province.

How any member of the medical profession can believe that the representatives of that profession seek to do injury to the profession is beyond comprehension. The Medical Council is just as desirous as anybody else, yes, even as desirous as the university men, to conduct its affairs and the affairs of the profession to the best possible degree of perfection, and those who are continually and incessantly decrying its efforts do more than they may be aware of in bringing the Council and the profession into disrespect with the public.

So far as legalizing osteopathy, or any system of healing, there is only one simple, safe rule to follow, namely, the same standard of matriculation, study, examination, and license for all. When that is carried out to the letter, they can practice osteopathy, homeopathy, musculopathy, arteriopathy, venopathy, or confine themselves to diseases of the top of the head or the last joint of the big toe.

No man should be licensed to practice medicine simply because he has been for a few years established in illegitimate practice. There should be backbone enough in the man who gets his back to the wall and who is "honest enough to be bold and bold enough to be honest" to hand out the square deal to a profession which all its livelong day has fought the battles of the people against the designing charlatan whose sole aim is to make money.

From whence do all these cults come? Where is their great breeding ground? The neighboring republic. It is the birthplace of Christian Scientists, Divine Healers, Eclectics, Homeopaths, Vitopaths, Chiropractors, Physio-Meds. What not? Is it not surprising then that a stolid British-American would be led astray by one of such faddists?

If osteopaths are to be licensed by Act of Parliament under the Ontario Medical Act, why not the chiropractors *et al?* Why not the masseurs?

And then what about the other fads which are yet to come? Some one will discover that stagnation in the veins and the deposit of silt is the true cause of all disease: then the venopathist will appear in the land. This will prove to be another epoch-making discovery and will make for bleeding in a double sense. Fads will not cease to appear, for a fool and a faddist are born every minute.

The people, however, will hope that their legislators will remember the maxim: "One law for all."

It is just about time the medical profession stood by its representatives with unanimous voice.

The third report on infant mortality, prepared by Dr. Helen MacMurchy for the Ontario Government, is undoubtedly the best upon the subject extant. Its prime object is to lessen or wipe out infant mortality, in so far as that can be done.

This can best be brought about by the proper education of the mothers and a full realization of the fact that each child is a law unto itself.

It cannot too strongly be pointed out that the most simple laws and rules are the best, for the multiplication of rules and directions will only tend to confuse and discourage.

Dr. MacMurchy says in this report a great deal of good may be done by giving the mother a leaflet. It would be far better to have large cards printed in bold type, which could be framed and hung up in some convenient place. These should state the simplest rules of guidance, and, of course, must be in the language the mother can read or understand. Then they will be kept; leaflets are easily lost or misplaced.

As infant mortality occurs to a greater extent amongst the poorer and foreign classes, the necessity for printed rules in different languages is apparent.

It would be a wise proceeding on the part of the Provincial Health Department to send a copy of Dr. MacMurchy's report into at least every English-speaking family where a child is born.

The proper handling of bread, advocated in these pages on several former occasions, has not so far as can be learned appealed to health officers.

Bread is a universal article of diet, but more attention seems to be paid towards enforcing the laws to protect fruits and other like food stuffs in shop windows from flies, dirt and dust. These are not the household articles that bread is, especially amongst the poorer classes.

It is a nice point of table etiquette that no one shall touch a slice of bread except for his own personal and immediate use. Bread comes to the table as an article of diet, unwashed, subjected to no cooking in the household, after passing through many hands.

Although contamination is abundant, public opinion has not yet demanded the sanitary delivery of the staff of life.

That bacterial contamination of bread has an element of danger there can now be no longer any doubt, for typhoid fever has been proven to have been carried by a bread-handler.

If one can be satisfied that the handlers of bread are non-tuberculous, that they are not in contact with any communicable disease, that they are always free from any venereal disease, cleanly, scrupulous in their private hygiene, all danger could be considered as reduced to the minimum and the sanitary handling of bread a mere bugbear. This, however, cannot be guaranteed. Therefore, it must be worth while when so much is being done for the prevention of disease through contaminated food stuffs that the most universal of all be properly protected.

Each loaf should be completely wrapped, bagged or boxed. Unwrapped bread carries countless bacteria; wrapped bread, few.

It is the plain duty of health officers to see that all bread is properly handled.

Brill's disease, the new name for typhus fever, health officers and physicians should be on the look out for, as it has apparently been epidemic in many places of the United States, and the Chicago Health Department has recently issued a warning to physicians to be on their guard.

This disease, the old famine or ship fever, typhus, is said to be of a mild type, and because it has been investigated and reported upon by Dr. V. E. Brill, of New York, carries his name. He has observed 255 cases in his vicinity without a single death.

Being transmitted by the body louse, the disease necessarily appears amongst the poorer classes, unlike typhoid which is no respecter of the rich or the poor.

The typhus virus is extracellular and free in the circulating plasma; while the serum of virulent typhus blood is constantly infective.

The onset of the disease is sudden with chill or chilly sensations, body pains, increasing headache, the temperature reaching its maximum on the third day. Here it remains between 103 and 104, sometimes as high as 106, lasting for 12 to 14 days, falling mostly by crisis.

On the 5th or 6th day a maculo-papular rash appears, dull red in color, irregular in outline, usually ovoid, 2 to 4 m.m. in diameter. It is erythematous in character.

The rash appears on the extremities and trunk, rarely on the palms and soles. The eruption is permanent until the end of the disease.

With defervescence, the spots fade rapidly, leaving brownish-yellow stains often gone in 24 hours.

The age of most common occurrence is between 20 and 40 years, children being rarely affected. In the sexes it is about evenly divided.

Practitioners noticing the appearance of this disease should report immediately to the health authorities.

EDITORIAL NOTES

AMERICAN HOSPITAL ASSOCIATION.

At Hotel Ponchartrain, Detroit, Sept. 24-27, the American Hospital Association will hold its fourteenth annual meeting and present indications point to one of the most helpful and largely attended gatherings in the existence of the organization. The presidential address will be delivered by Dr. Henry M. Hurd, Secretary, board of trustees, Johns Hopkins Hospital, Baltimore.

Various reports will be presented by Dr. C. R. Holmes, Trustee, City Hospital, Cincinnati; Dr. Thos. Howell, Superintendent New York Hospital; Dr. Wayne Smith, Superintendent City Hospital, St. Louis; Mr. J. B. Draper, Superintendent University Hospital, Ann Arbor, Mich.; Dr. R. O. Beard, University of Minnesota, Minneapolis; Dr. S. S. Goldwater, Superintendent Mt. Sinai Hospital, New York City; Rev. G. F. Clover, Superintendent St. Luke's Hospital, New York City, and Dr. Frederick A. Washburn, Superintendent Massachusetts General Hospital, Boston.

The programme is unusually good. It will include these papers among others:

The Economic Features and Feeding of Hospital Employees and Patients. Dr. H. T. Summersgill, Supt. Post-Graduate Hospital, New York City.

Hospitals and their Duty in Relation to the Prevention of Disease. Dr. Chas. P. Emerson, Dean of the Medical Department, University of Indiana, Indianapolis.

The Hospital Laundry. Dr. Winford H. Smith, Supt. Johns Hopkins Hospital, Baltimore.

A Contribution to the Problem of Convalescence. Dr. Frederick Brush, Supt. Burke Relief Foundation, New York City.

The Use of Salvarsan (606) in Hospitals. Dr. R. R. Ross, Supt. General Hospital, Buffalo, N. Y.

The Cost of Infectious Diseases. Prof. Jas. W. Glover, University of Michigan, Ann Arbor.

The Relation of the General and Special Hospitals in the Care of the Insane. Dr. Chas. K. Clarke, Supt. General Hospital, Toronto, Canada.

Hospital Organization with Special Reference to that of the Detroit General. Dr. W. F. Metcalf, Detroit, Mich.

The Question Drawer. Dr. Alice Seabrook, Supt. Woman's Hospital, Philadelphia, Pa.

Round Table Conference for Workers in Smaller Hospitals. Miss Louise Brent, Supt. Hospital for Sick Children, Toronto, Canada, and Miss Amy Armour, Supt. New Rochelle Hospital, New Rochelle, N. Y.

The Grading of Nurses. Mrs. E. G. Fournier, Supt. Minnewaska Sanitarium, Gravenhurst, Ont., Canada.

Dr. J. N. E. Brown, Supt. of the Detroit General Hospital, is the General Secretary.

AMERICAN ASSOCIATION OF CLINICAL RESEARCH.

The fourth annual meeting of the American Association of Clinical Research will be held in New York City, at the Academy of Medicine, on November 9, 1912.

The sessions will be held from 9 a.m. to 1 p.m., from 3 p.m. to 6 p.m., and from 8 p.m. to 10 p.m. The evening session will be open to the public.

Notable contributions on the Negri Bodies, on certain Fluids for Tubercle Bacilli in the Urine, on Adjustment and Function, on Psychoanalysis and Traumbedeutung, on a Pandemic of Malignant Encapsulated Throat Coccus, on the Single Remedy, on Indicanuria and Glycosuria, on Disease Conditions expressive of Correct Diagnosis, on Biochemic Problems, on the Two Most Far-Reaching Discoveries in Medicine, and others are to be given. Every member of the Association is cordially invited to contribute a paper. The title should be sent at once to the Permanent Secretary, so that the programme may be completed.

As soon as completed, the programme will be mailed to you. Please make an effort not only to contribute a paper, but to be present at the coming meeting, to bring your friends, and to assist in the most important movement of medicine as represented in the aim of our Association, the systematic, scientific investigation and advancement of medicine by conclusive clinical and clinically-allied methods.

Please invite your friends to become members. Your support and that of your friends will be cordially appreciated.

News Items

Sir William Osler will visit Toronto in September.

Dr. Herbert J. Hamilton, Toronto, has sailed for Europe.

Dr. Samuel Johnston, Toronto, has returned from New York.

Dr. Charles E. Secord, New York, is visiting in St. John, N.B.

Dr. Wm. Arrell, formerly of Dunnville, is practising in Hamilton.

Dr. Herbert W. Nancekivel, formerly of Ingersoll, has moved to Foxbury, Sask.

Dr. B. S. Elliott, Toronto '07, has moved from White Plains, N. J., to Vancouver.

Dr. Frank Duston, of the Springfield, Mass., Hospital, is visiting in St. Stephen, N.B.

Montreal is promoting a new hospital for sick babies under two years of age. It will have 200 beds.

Dr. E. E. King, Toronto, will spend his holidays in August at his summer home in Hastings Co.

Dr. C. F. Moore, Spadina Rd., Toronto, has moved to the house of his brother-in-law, Dr. Wm. Britton.

Dr. A. C. Hendrick and Dr. A. W. Maybury, Toronto, have returned from a trip to the Old Country.

The Montreal Star has conducted a fly campaign which resulted in the death of 25,000,000 of these pests.

Dr. Charles G. Sutherland, South Porcupine, has been appointed Medical Superintendent of Moose Jaw Hospital.

Professor James Playfair McMurrich, of the University of Toronto, has been made Doctor of Laws by the University of Michigan.

Drs. A. A. Weagant, Ottawa, H. R. Casgrain, Windsor, and T. E. Kaiser, Oshawa, have been appointed members of the Ontario Board of Health.

Dr. Sloan, Surgeon to the Central Prison, Toronto, has resigned after fifteen years' service. Dr. Jas. Algie, Toronto, has been appointed to the position.

Dr. A. T. Stanton, who has been doing research work on tropical diseases in the Malay Islands in the interests of the British Medical Association, is visiting at his home in Newcastle, Ontario.

We regret to announce that Dr. Wm. Britton, Toronto, a physician well-beloved by his confreres, has retired from practice owing to ill-health. He is spending the summer in Brantford and in the Autumn will tour the West.

The American Medicine Gold Medal for 1912 has been awarded Dr. Wm. C. Gorgas, Panama, whose public health work has been the most conspicuous of any work in the domain of medicine in that country during the past year.

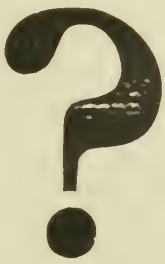
The meeting of the Canadian Public Health Association will be held in Toronto, September 16th, 17th and 18th, and an interesting programme will be presented. At the same time the Annual Conference of Medical Officers of Ontario will be held.

Dr. John N. E. Brown, Secretary of the American Hospital Association and formerly Superintendent of the Toronto General Hospital, has been appointed Superintendent of the Detroit General Hospital. Congratulations to the D. G. H.

Canadian physicians visiting in London, England, are: Dr. B. E. McKenzie, Toronto; Dr. J. A. Tanner, Vancouver; Dr. T. Shaw Webster, Toronto; Dr. W. L. Hatman, Montreal; Dr. E. Jones, A. C. Hendrick, and F. W. Rolph, Toronto; Dr. Hanford McKee, Montreal; Dr. E. Pelletier, Montreal; Dr. J. George Adami, Montreal.

Dr. Wm. C. Barber, for twenty-three years in the Ontario Hospital for the Insane service, has established a new sanitarium at Barrie, Ont., to be known as "Simcoe Hall." This institution is beautifully situated close to Lake Simcoe, 175 feet above its level and about 800 feet above that of Lake Ontario. Simcoe Hall was formally opened on the 6th of July. We wish Dr. Barber the fullest success in this new enterprise.

The work of Dr. Alexis Carrell, of the Rockefeller Institute, New York, which Dr. Carrell recently presented before the Ontario Medical Association, has attracted great attention from medical scientists in France. Leading biologists say that if the results are authentic, they form the greatest scientific advances of the generation. It is proposed that a deputation of French biologists visit the institute in New York and determine that Dr. Carrell's claims are founded upon fact.



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Publishers' Department

THE NEW COMPOUND TERPENE PEROXIDE ($C_{10}H_{16}O_2$).—Every method or remedy before it is accepted by the medical profession, must withstand the battle of criticism due to the skepticism of the physician. One cannot help but feel that skepticism and thorough investigation aid in establishing the merits of a method or remedy. We need but quote from medical history such men as Harvey, whose theory regarding the circulation of the blood was laughed at for years. Pasteur met opposition of the most pronounced type. Jenner did not have an easy time. It took Laveran over fifteen years to get his ideas recognized concerning the transmission of malaria. Not until Wright was collecting the left-overs from every clinic in the city of London did the profession realize what an important stride he had helped them to make in the treatment of diseases when he announced the vaccine therapy.

Dr. William Neel, of Chicago, after years of untiring labor, presented to the public an apparatus whereby the oxygen of the air could be concentrated and passed through the hydrocarbon oils of the Terpene group forming terpene peroxide. We are also glad to announce that the Neel-Armstrong method of treatment for diseases of the respiratory tract and wherever suboxidation is a prominent factor has withstood the battle of criticism and skepticism and has come out victorious in the end. The prudent physician will go by the law of cause and effect when he administers a medication, needless to say if the active principles are not present the medicine is useless, but where the active principles are present the result of the medication must correspond.

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Mrs. MacKinnon's Massage Institution, 20 Walmer Road, Toronto. Telephone, College 7895. Mrs. Neil MacKinnon, for many years a specialist in all branches of massage, having received her training in the Old Country, has within the past few months opened an institution in this city at the above address. All forms of massage, including electrical, electric light, and needle spray baths are administered in this institution under her personal supervision. The location of her institution is one of the best that could be desired, and there is a beautiful conservatory with a southern exposure. There is a masseur in attendance for male patients. The rooms are large and sunny, the appointments being especially tasty and well adapted for carrying on such work. Physicians are invited to visit and inspect for themselves.

The Hay-Fever Riddle.—Despite the many therapeutic advances of recent years, "what to do for the hay-fever patient" continues to be something of a puzzle. The long-sought specific still eludes us. Nevertheless, the malady is not quite the enigma that it once was. Medication, if still empiric, is not ineffective. The symptoms of the disorder can be controlled or minimized; relief, though temporary in many cases, may be obtained, and for these blessings the afflicted patient and the sympathetic physician may well be thankful. For use in the treatment of hay fever there is, of course, a long line of so-called available medicaments. One dependable agent which comes naturally to mind in this connection is Adrenalin. Indeed, it is doubtful if any other single medicinal substance has been so largely and successfully employed in the treatment of vasomotor rhinitis. As adapted to the needs of the hay-fever sufferer the product is available in a number of convenient forms, as Adrenalin Chloride Solution, Adrenalin Inhalant, Anesthone Cream, Anesthone Inhalant, Anesthone Tape, etc. The various solutions are used in spraying the nares and pharynx, the cream for snuffing into the nostrils, the tape for packing the nostrils. All cases of hay fever, of course, are not amenable to the same form of treatment. It is a logical presumption, however, that a vast majority of them ought to yield to one or more of the preparations above referred to. The Adrenalin products, as is well known to most physicians, are manufactured by Parke, Davis & Co., who will doubtless be glad to send literature regarding them to any practitioner. Requests for printed matter may be addressed to the company at its offices and laboratories in Walkerville, Ont.

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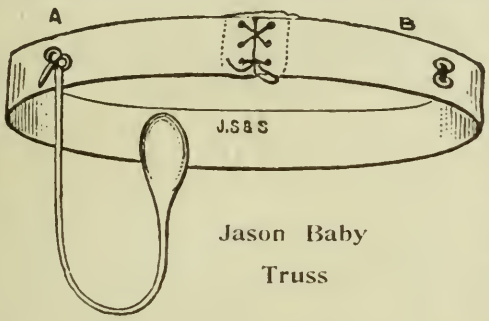

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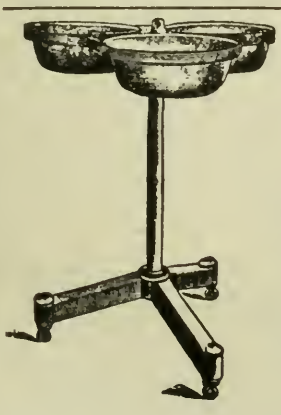

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Famous Paintings.—This year's display at the C. N. E. is in advance of other years. The list of paintings coming from Europe for this year's Canadian National Exhibition fairly bristles with famous names. There are forty paintings loaned by the French Government, while such names as Lord Leighton, Sir John Millais, Orpen, etc., make the British collection even more interesting than usual. The display of art on the whole promises to be well in advance of any previous exhibits.

Poultices Should Be Sterile.—Prof. George Howard Hoxie, of the University of Kansas, in his most excellent book on "Symptomatic and Regional Therapeutics," states under the heading of localized inflammation that "the danger of infection should ever be in mind in applying a poultice, for the maceration incident to the poultice favors infection, even if in ordinary circumstances one might consider the area germ proof." Again he refers under the chapter on Pain, to the dangers from using dirty poultices and that skin affections have been added to the ordinary disorder when bread-and-milk or linseed poultices have been used to relieve pain. It is thus noted how important then, it is, in the employment of a poultice for the relief of pain and inflammation, that a sterile and trustworthy product be applied. Inasmuch as poultices are a means of producing Hyperemia by the use of heat and insofar as they do this better than by other means, it is interesting to observe that in the belief of Prof. Hoxie "the clay poultices, known best in the form of Antiphlogistine, are the best to employ, as they are sterile and clean." Antiphlogistine affords not only a safe but clean method of utilizing the advantages of hot moist heat in the treatment of pain or inflammatory conditions. It maintains heat in contact with the part for hours and its adaptability is only secondary to its therapeutic value.

Wonderful Programme.—Great List of Special Attractions for the C. N. E. The programme of special attractions for the Canadian National Exhibition has just been issued. It is featured by the Imperial Cadet Review and Competitions with representative corps from all parts of the Empire, and the two famous bands from England, the Scots Guards Band and the Besses O' Th' Barn Band, but these are a small part of the programme. There is enough

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Lime Water vs. Phillips' Milk of Magnesia.—Lime water, according to the 8th decennial revision of the U. S. Pharmacopeia, should contain not less than 0.14% of pure Calcium Hydroxide ca $(OH)_2$, about 10 grains to the pint. The percentage of Calcium Hydroxide varies with the temperature at which the saturated solution is prepared, being 0.17%, about 12 grains to the pint at 15°C. (59°F.), and diminishes as the temperature rises.

In over 100 samples of lime water obtained from reputable pharmacists the amount of Calcium Hydroxide varied from 1 to 11 grains to the pint. 75% examined was below standard strength and in several the percentage of lime was so low as to make the preparation practically worthless.

Phillips' Milk of Magnesia is a hydrate containing not less than 24 grains of pure Magnesium Hydroxide ($Mg\ H_2\ O_2$), to the ounce. A teaspoonful is equivalent in acid neutralizing power to about 6 ounces of lime water of standard strength.

"50 c.c. of lime water require for complete neutralization not less than 19 c.c of tenth-normal Sulphuric Acid V. S. (corresponding to about 0.14% of Calcium Hydroxide), phenolphthalein T. S. being used as indicator" U. S. P.

50 c.c. of Phillips' Milk of Magnesia require for complete neutralization not less than 900 c.c. of tenth-normal Sulphuric Acid V. S. (corresponding to about 5% Magnesium Hydroxide), phenolphthalein T. S. being used as indicator.

Electricity on the Farm.—Hydro-Electric will demonstrate at the C. N. E. Just how electricity can be utilized on the farm will be fully shown at the Canadian National Exhibition. The Hydro-Electric Commission have taken a large space in the Process building where all kinds of farm machinery will be run by the white juice from Niagara. It will be a demonstration no up-date farmer can afford to miss.

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Original Articles

HYPEREXTENSION OF THE KNEE FOLLOWING HIP DISEASE*

By B. E. McKenzie, B.A., M.D.
Senior Surgeon, Toronto Orthopedic Hospital.

Hyperextension of the knee joint, or, as it is called, genu recurvatum, is seen not infrequently in persons who have been confined to bed in the supine position for a considerable length of time. Examination of this young woman's condition and enquiry into her history reveals interesting causes as explanatory of her condition.

H. J., fourteen years of age, had scarlet fever five years ago, followed by disease of the right hip. She was treated by recumbency in hospital for nine weeks, followed by a brace, which was worn for a year. The hip now presents no evidence of present disease. The thigh and leg show a moderate degree of atrophy. The right femur is one-half inch shorter than the left, and the tibia slightly shorter than its fellow. The proximal articular surface of this tibia is shown in a radiograph as altered in direction. If a normal tibia be held vertical it will be seen that its upper articular surface slopes backward and downward, whereas the corresponding surface in this bone slopes downward and forward. The radiograph shows also an area of increased density at the anterior portion of the bone, just below the tubercle, at which point the tibia is bent so that its anterior surface recedes and is concave, whereas in the normal bone the anterior border of the bone here presents a convexity forward.

A probable explanation of the altered direction of the superior articular surface is afforded if we assume that the knee was allowed

*Note.—Interesting case shown at the Saturday clinic at the Toronto Orthopedic Hospital.

to become hyperextended while the patient was recumbent in the supine position under treatment for hip disease.

1. Thereby increased pressure when weight-bearing was resumed would come upon the anterior part of the articular surface of the tibia.

2. This increased pressure would tend to depress the anterior portion of the enlarged extremity of the tibia and alter the direction of the articular surface.

3. It would also cause greater compactness, and probably early synostosis at the anterior part of the epiphyseal junction.

4. It would thus cause shortening of the tibia, especially at this anterior part.

During the course of disease at the knee it is well known that the increased congestion of the part bringing more pabulum to the chief growing areas of both tibia and femur, causes relatively increased length, so that the affected limb in such a case is usually longer than its fellow. Disease at the hip joint, however, on the other hand, causes so much interference with the nutrition of the entire limb that growth, both in circumference of the bones and in their length, is retarded. The continuance of the hip disease during some years of the actively growing period of life has so interfered with the growth of the limb as to make this one about an inch and a half shorter than its fellow.

The disability of the limb in this patient resulting from hyperextension, from atrophy, from shortening and from disease, was very marked, and it was on this account that advice was sought. The girl's general condition was fairly good, though she was not robust. She used a crutch in walking, and could accomplish but little without its aid.

Treatment.

The method of treatment adopted was to perform osteotomy of the tibia immediately below the tubercle, and so alter the alignment of the tibia at this point as to make a considerable elbow there, the salient angle pointing forward, thus restoring the normal convexity. This was made sufficient to fully overcome the degree of hyperextension. During the weeks while laid up with a fixation dressing applied, the knee was kept flexed at an angle of about thirty degrees. I have no doubt that the ligaments and other structures of the posterior aspect of the joint shortened somewhat during this period. These causes, together with the change in

alignment of the tibia, proved sufficient to over-correct slightly the genu recurvatum, and a few months later she was walking with a consciousness of increased power, and control was gradually returning.

Disability at the knee joint when there has been no disease affecting the part is due occasionally to laxity of the ligaments and other structures which should keep the bones which enter into its formation in close and firm apposition. The causes doubtless are varied. One of the most frequent, however, is faulty nursing while confined to bed supine. It has often been stated that extension applied to the lower extremity in such a way that the femur is not grasped is responsible for this relaxed condition of the knee joint. For several years, however, the writer has so applied the power, when extension is required, as to grasp the leg only at a point just above the ankle joint by means of an anklet or gaiter fitting comfortably that part and forming the fixation to the limb for the traction force. As a result, disability has never been seen at the knee joint. While thus recumbent a small pillow or pad should be placed under the knee, so that a slight degree of flexion should be constantly maintained. The disability and laxity of the joint is a result of hyperextension rather than of direct traction made upon the joint.

ST. LUKE'S GENERAL HOSPITAL, OTTAWA, NURSES' GRADUATION, MAY, 1912

Address by Dr. R. W. Powell.

The graduation exercises at St. Luke's General Hospital this year took place in the hospital on May the 15th, and were honored by the presence of Her Royal Highness the Duchess of Connaught, who presented each candidate with her diploma and medal.

The chair was taken by Sir Louis Davies, in the absence of Mr. J. R. Booth, the President of the hospital, and the proceedings were opened by Sir Louis with a few words of welcome to Her Royal Highness.

Dr. W. C. Cousens, Chairman of the Medical Board, then read the official returns of the standing of the nurses, and administered the Florence Nightingale pledge to the graduates.

The nurses presented Her Royal Highness with a handsome bouquet of roses, and this was followed by the presentation of the lecturer's prize to Miss Edith Exton, of Leeds, England.

The names of the graduates were: Miss P. Mott, Aylmer, Que.; Miss M. McKinnon, Miss F. Vance, Miss F. McConnell, Miss M. Owen, Miss C. Latimer, Miss L. McDermott, Miss F. Sheridan, Miss F. West, and Miss E. Exton.

The Chairman then called upon Dr. Robert W. Powell to address the nurses in valedictory.

Dr. Powell, on rising, said:

May it please Your Royal Highness, Mr. Chairman, Ladies and Gentlemen,—

Like others who have preceded me on this interesting occasion, it seems incumbent upon me to offer an apology for my appearance to-day to say a few words of encouragement and of farewell to the graduating class.

The Board of Governors and the Medical Board, which, I may say, has some administrative functions in this institution, have thought it a great pity that this present class of young ladies should be allowed to escape from the hospital without a few words of advice and farewell from the Secretary of the Board, and one who has taken in the past a deep interest in all that concerned the education of the nurses.

My colleagues on the Medical Board are by nature a retiring body of men when such functions as the present have to be undertaken; but in some other walks of life, when they appear dressed in official garb, with white operating gowns and rubber gloves, they are not so retiring in disposition. Then again my enforced absence from the graduating exercises for the past two years gave them an opportunity to do me a favor and good turn, from their point of view, and to allow me to take advantage of this occasion to blow off some bottled steam.

This class of 1912 graduates are particularly to be congratulated that the gracious lady occupying the most exalted position in Canada now has so generously consented to be present to-day to deliver personally to the members of the class their diplomas and medals, and I am sure no one who thinks on the subject at all can fail to realize what an occasion such as this must mean to the young ladies before us, and how it must be a stimulus to them, accentuated as the day is by the presence of royalty and by the countenance of all the friends whom they most value, to so fashion their future conduct and career that none of us will ever regret having been present on this interesting, and more or less solemn, occasion. This present class have not had the opportunity of listening to me from the lecture platform, as has been my custom, and that is a still further

reason why I may be pardoned if I speak a little at length to them to-day.

My first duty, of course, is to congratulate you, and I do so from the bottom of my heart, on having to-day attained the goal of your hopes and aspirations. It has been a long and weary fight, accomplished under all sorts of disadvantages, but you have conquered all obstacles and have come forth with flying colors. We realize only too well what these disadvantages have been, but we have been powerless to avoid the conditions. We are a modest institution, in size and equipment, and we have not been able to offer certain advantages attainable in other larger and more favored hospitals. Your accommodation here is unsuitable and cramped, and your opportunities for rest and recreation very limited, but you have accepted the situation loyally, and have surmounted the disadvantages of the situation, and have realized, I am sure, that we have given you in your education the best that we had.

Coming to closer quarters, it seems opportune to say that the cross words and black looks and irritability of temper shown at times towards you have been a necessity. In the first place, it is inseparable from your training, and while many a night you have laid down your aching head on your pillow, almost determined to retire from the fight, yet other occasions of triumph and well-doing have been accomplished by light hearts and glistening eyes when you were commended. This adverse criticism has been primarily done for the benefit of the sick under your care at the time, and for those who may hereafter be under your care, because it is essential that orders must be faithfully obeyed and executed, and firm discipline maintained. If it were otherwise, the whole hospital machinery, often very delicate, would absolutely run riot. Recollect that you are not singular in the making of errors; it happens to all of us; it is a necessity of our human nature. There is a well-authenticated record, buried, I hope, deep down in the archives of St. Luke's Hospital, that our present estimable Lady Superintendent once made a mistake. Is not that wonderful? Is it not a source of encouragement to us all? I fancy, if the truth were only known, the same might be said of her capable assistant in the work. They are none the worse for it, and neither are we. When a vacancy was created in the office of Lady Superintendent of this training school, owing to the lamented death of Miss Chesley, we chose one of our distinguished graduates, whom we knew so well, and one who had filled the position of Assistant Superintendent so satisfactorily, and offered her the position at once. His Grace the Archbishop, here with us to-day, will be able to tell you officially what

I am only able to tell you as a layman, that mistakes in administration occur to all of us, and that "angels once fell." So there is hope for us all, and great encouragement. Positions which others have secured by honest, painstaking devotion to duty are attainable by any one of you here before me to-day; but remember, only by the same process and through similar channels.

The gate of the pasture has been unlocked for you to-day by Her Royal Highness, and it is for you now to enter the field and so perform your daily tasks that your good labor will be recognized by its fruit. A great many thoughts arise in my mind that I would like to emphasize, but I must be content with a few salient points, and some that I hope you will remember.

This is a solemn occasion. The pledge that you have just voluntarily taken places the seal of solemnity on the whole proceedings. You have undertaken before God and before this assembly that you will fashion your practice and your lives on certain well-recognized high principles; see that you have not taken this pledge lightly or wantonly. I well remember the day, many years ago—I won't tell you how long—that I stood up before my teachers and solemn Dons, Fellows and Professors, and took the Hippocratic Oath preparatory to receiving my degree. I felt it to be a very solemn moment, and I there and then determined that I would, to the best of my ability and powers, so conduct my life in matters professional that I would not bring the blush of shame on my teachers or my college, who had given me of their best, and I would wish you to adopt the same attitude now to-day, and take your life, as regards your chosen calling, seriously.

There is a small part of your anatomy situated in a cavity between your nose and your chin, called the tongue, and while it has been called by the Psalmist of old "the pen of a ready writer," I think St. Paul's definition is more to the point as regards the human race, and he indeed must have had great powers as a diagnostician of rare perception when he termed it "the unruly member." It is capable of getting us all into more trouble in a short time than any other one organ we possess, and its powers for evil do not stop there, but it gets other people into trouble as well. Keep strict guard over it and see that when occasion requires it is well in harness behind your teeth and the reins drawn tight. If it ever gets loose it is apt to wag incessantly, and nearly always at the wrong time, and, moreover, what it utters cannot as a rule be amended.

When on business, stick closely to what you have on hand, and if your eyes see, or your ears hear, matters not intended for you,

but which you cannot help observing, be careful that you keep the information strictly to those organs, and do not pass it on to your voice apparatus, over which your "unruly member" presides with so much power. No matter what your other qualifications are—your physique, your carefulness, your endurance, your watchfulness, your wide sympathy, your tenderness, or your devotion to duty—you will be useless as a trained nurse and absolutely unfitted for private practice if your tongue runs away with your judgment, or your discretion, and you will at once lose your influence and your power for good, and confidence in you will be destroyed.

Besides all this, remember that a talkative, parrot-like nurse is abhorrent to most patients who, when ill, as a rule, care not to be entertained in this way, especially if the subject of conversation is other people's affairs. Tale-bearing and chattering about what you see in other people's houses, while it may tickle the ears and imagination of a certain class of people, is an abomination that ought not to be tolerated for a moment as part of the make-up of the trained nurse. In fact, to do these things is at once to advertise yourself as quite untrained.

You may rest assured that medical men will not befriend you, or employ you, if they once realize that you are of this type of dangerous citizen. The devil—I apologize—I did not mean to even mention the gentleman's name—but let us call him the captain of the lower regions. Well, the great trouble with him is that he is not domesticated; he will not stay at home.

I presume, if all reports are true, that home is not too attractive a place for him; the atmosphere is close and sticky, and even in winter it is apt to be sultry, and the consequence is that he is constantly leaving his abode and putting in an appearance on this fair world, and poking his nose into other people's business, and buzzing about, making himself very objectionable. He ought to be kept in his place, and each time he shows himself above ground he ought to be cracked on the head and made keep quiet, and be told politely, but firmly, that he is "*de trop.*" If all the human race would adopt this attitude he would soon tire out and sink to his own level, and finally be annihilated and suffocated in his own environment. It is the encouragement he receives by our misdoings that gives him pabulum for existence. He is frightened at anything savoring of a reversal of his schemes. This is the idea underlying the two lines of Cowper's beautiful hymn:

"And Satan trembles when he sees
The weakest saint upon his knees."

This used to be rendered "sinner," but we are getting better now, and we are termed "saints." I hear someone say: "What is Powell driving at?" It ought to be manifest.

If you were a class of graduates in Arts, or Science, or Domestic Economy my mind would in all probability be drifting in another direction; but it is because you are a class of graduate nurses that I am talking on these lines. Do not imagine for a moment that your Creator will place you on a pedestal, safe from temptation to do wrong; not at all. The time may be short or long, but come it will, and that sooner than you possibly dream of; and be sure that you make up your mind now, at once, firmly and boldly, that the very first suggestion will be thrown back with the scorn it deserves, and that you will hurl the tempter from you. Each reversal for him weakens his power and reads victory for you, and, moreover, the victory is easier on each successive occasion.

Your conscience comes to your rescue and strengthens you for the next battle. The temptation may assume many a subtle form—at one time financial, another time enhanced worldly power or position, and next some other insidious suggestion of advancement in what you most prize and value. Always adopt the same attitude; tell the approacher, who is an emissary for the special occasion, and often chosen with intelligent discrimination to soften the blow, that the application has come to the wrong door; that he or she must descend a bit lower down the avenue of life and keep on descending till one is found on a level equal to the proposer of ill deeds; that you are trained on different lines and do not consort with sordid creatures, or low and vulgar people.

The Florence Nightingale lamp must be ever well oiled and kept lighted in your hearts and homes, and with her, the earliest lady nurse whose works have followed her, and whose name will go down to posterity as a shining example of a stirring devotion to duty, and a life budding and then blossoming with shining crystals of fortitude and Christian excellence, as your guide and beacon, and with the memory of to-day kept bright and burnished, and the glad faces enjoying your happiness and extending to you their sympathy, and above all with the recollection of the gracious royal lady who, at personal inconvenience, has come to-day to preside at your graduation and speak her personal congratulations, surely you must be termed fortunate graduates of St. Luke's, and such a day must strengthen and fortify you for your life's work.

You have to-day placed your foot on the first rung of the ladder that leads to success or failure, and I want you to determine well that you will work with all your might and main to achieve success

in your noble calling. Take hold of the ladder with both hands and never let go as you proceed to climb upwards. Be careful you don't slip. You are not likely to do so from the first rung, as there is not much space below; but as you go on you will find some of the rungs thorny and slippery—yes, and some even slimy—and they become difficult to negotiate. The lower rungs, also, are crowded, and you are liable to be pushed off to one side or the other in the scramble.

If you come down a rung or two through carelessness or inattention, or, what is worse, by doing that I hinted at a while ago, you will find it difficult to recover the lost ground, and more than that, the way becomes even more beset with difficulties than it ever was before. Keep your eye always on the top rung. What others have attained to you can accomplish. Your motto must be "Onward and ever onward; upward and ever upward." There is always plenty of room at the top for all of us. The lower and middle rungs of life are crowded, but as you pass the rubicon the atmosphere is clearer; the air is lighter; breathing becomes easier. So much is this the case that the remark has become a truism. When we get over a difficulty or surmount an obstacle that was causing anxiety we say, "I breathe more freely now." We have an example of the top rung here with us to-day, and the head of the Anglican Church in Canada has not attained to his lofty and dignified position without much patient care and laborious, persistent effort. He can show forth personally to-day in our midst what I can so feebly put into words, viz., that there are plenty of priests and deacons, but very few archbishops.

Finally, young ladies, let me beg of you to keep a warm place in your hearts for your Alma Mater, she who has given you birth to-day; she needs your assistance and your sympathy. She rejoices with your triumphs and your successes and grieves over your downfalls and your failures; she feels her responsibility more keenly than you imagine; she is anxious for your welfare, but is also jealous of her own reputation; she is the one, you graduates are the many; she has not been in a position to do all for you that she would have wished, but she has done what she could with the opportunities she possessed, and what she has done she has done ungrudgingly. She expects in return your loyal attachment and real support; not only a lip support, which is easy to give and costs nothing, but a support from your heart and your brains that may cost you some small sacrifice at times.

You will have in life no better friends than the authorities of this hospital, who will now watch your career with eager hope and

high expectations. Don't reward us the wrong way; don't sully the name of St. Luke's, but uphold the institution in every possible way and advance her interests whenever opportunity offers; don't bring the blush of shame to our faces by unladylike actions, loose, wanton conversation, or grievous misdemeanor; but conduct yourselves after the pattern of those good women of old and also of those of modern days, who never weary of well-doing, and who keep themselves spotless and untarnished in their character. The world knows nothing finer than a kind, sympathetic, good-looking, modest and chaste woman.

My last word is on my tongue, and I am done. If you find yourselves, soon or late, in trouble or distress of any kind, be it of mind or body, be it moral or physical, or financial, the hand of fellowship will be held out to you here and always and forever.

Where can you turn for succor in time of anxiety and need if not to her who gave you birth? And if this is true of your human frame, and applies to your nature as woman, it is equally true and forcible that your scholastic mother, St. Luke's Hospital, in its corporate capacity, as well as individually by its members, will ever be faithful to its responsibilities for you and proud and glad to have the privilege of helping you in time of need.

Young ladies, farewell.

CANADIAN PUBLIC HEALTH ASSOCIATION

The second annual meeting of this Association was held in Toronto on Monday, Tuesday and Wednesday, the 16th, 17th and 18th of September.

The public address was given on the evening of Monday, September 16th, by Dr. W. A. Evans, of Chicago, who is recognized as one of the foremost public health authorities in America. The President, Dr. Charles A. Hodgetts, Medical Adviser to the Commission of Conservation, Ottawa, delivered his address on Tuesday.

The meetings were held in the Medical Buildings of the University of Toronto.

The Annual Conference of Medical Officers of Health of Ontario was held in connection with this meeting.

1.—Section of Military Hygiene.

J. T. Fotheringham, Lt.-Col. P.M.O., A.M.S., Chairman.

Paper—G. Carleton Jones, Col. A.M.S., D.G.M.S., Canada.

"The Sanitation of the Bivouac."—D. B. Bentley, Lt.-Col. A.M.C., District Officer of Health, Ontario.

"Simple Means for Ensuring Supply of Drinking Water on Active Service"—Campbell Laidlaw, Lt. A.M.C.

"Some Observations on Sanitation for the Soldier"—T. B. Richardson, Major A.M.C.

"The Militia as a Factor in Public Health"—Lorne Drum, Major A.M.S.

2.—Section of Milk Inspection.

Andrew R. B. Richmond, V.S., B.V.Sc., Chairman.

"Municipal Milk Inspection in Toronto"—G. G. Nasmith, Director of Laboratories, City of Toronto.

"Municipal Food Inspection"—Robert Awde, Chief Food Inspector, Toronto.

"Dominion Meat Inspection"—L. A. Wilson, in Charge of Dominion Meat Inspection Staff, Toronto.

"Municipal Meat Inspection"—Andrew R. B. Richmond, Chief of Staff of Veterinary Inspectors, Toronto.

3.—Section of Sanitary Engineers.

T. Aird Murray, C.E., Chairman.

"Toronto Filtration Plant"—F. F. Longley, C.E., Toronto.

"A Complete Sewage Disposal Plant for a Public Institution"—T. Lowes, C.E., Toronto.

"Filtration of Water, from an Engineering Point of View"—T. Aird Murray, C.E., Toronto.

"How to Obtain Efficiency from Pressure Filters"—H. W. Cowan, C.E., Toronto.

4.—Section of Medical Officers of Health.

James Roberts, M.D., Medical Officer of Health, Hamilton, Chairman.

"A Modern Hospital for Communicable Diseases"—Dr. Chas. J. Hastings, Medical Officer of Health, Toronto.

"The International Hygiene Exhibition, Dresden"—Dr. J. F. Honsberger, Berlin.

"Municipal Control of Milk Supplies"—Dr. Whitelaw, Medical Officer of Health, Edmonton, Alta.

"The Importance of Trained Sanitary Inspectors"—Dr. A. J. Douglas, Medical Officer of Health, Winnipeg, Man.

5.—Section of Medical Inspection of Schools.

Dr. W. E. Struthers, Medical Inspector of Schools, Toronto, Chairman.

"Tuberculosis in Children"—Dr. J. H. Elliott, Toronto.

"Nursing Side of Medical Inspection of Schools"—Miss L. L. Rogers, R.N., Toronto.

Lantern Slides of the Work of Medical Inspection of Schools in Toronto—W. E. Struthers, B.A., M.D., Toronto.

"The Feeble-Minded Child"—

6.—Section of Social Workers.

Joint Secretaries—Vincent Basevi, Editorial Staff, "*The News*," Toronto; Dr. W. A. Whyte, Medical Superintendent Riverdale Hospital, Toronto.

Convener—Helen MacMurchy, M.D.

"Prevention of Social Misery"—J. Howard T. Falk, General Secretary, Associated Charities, Winnipeg.

Discussion.

Dr. J. A. Pagé, Medical Superintendent, The Immigration Hospital, Quebec, P.Q.

Dr. MacAuley, Chairman Board of Health, Halifax, N.S.

Mr. J. W. Smith, President Children's Home, Regina, Sask.

Dr. W. E. Home, Victoria, B.C.

Rufus D. Smith, Secretary Charity Organization, Montreal, P.Q.

Mrs. Smillie, Women's Club, Montreal, P.Q.

Dr. Huerner Mullin, Hamilton, Ont.

Mr. Edward Gurney, Toronto.

Mr. Joseph W. Bonnier, Recorder of Vital Statistics to the Quebec Government, Quebec, P.Q.

Mr. Rowland Dixon, Clerk of Statistics to the Manitoba Government, Winnipeg, Man.

Miss Alice Ravenhill, Shawnegan Lake, Vancouver Island, B.C.

Mr. G. A. Smith, General Supervisor Toronto Playgrounds Association, Toronto.

Mr. G. Frank Beer, President of the Toronto Housing Co.

"The Dentist as a Social Worker"—Dr. A. W. Thornton, Toronto.

Discussion.

Mrs. Adam Shortt, M.D., Ottawa.

Dr. Albert E. Webster, Toronto.

Mr. Joseph Likely, St. John, N.B.

Dr. W. H. Delaney, D.P.H., Quebec, P.Q.

A Symposium—"The Scientific Management of Household Work and Workers."

From the Viewpoint of the Mistress—Mrs. L. A. Hamilton, Lorne Park, Ont.

From the Viewpoint of the Maid—Miss Yates, O.A.C., Guelph.

From the Viewpoint of the Physician—Dr. T. F. McMahon, Toronto.

From the Viewpoint of the Church—Rev. Daniel Strachan, Toronto.

From the Viewpoint of the Settlement—Miss Helm, University Settlement, Montreal, P.Q.

From the Viewpoint of the University—Miss Cartwright, Lady Principal, St. Hilda's College, Toronto.

(Ten minutes for each speaker.)

Discussion.

Dr. Grace Ritchie England, Montreal.

Professor Stevenson, University of Toronto.

7.—Section of Laboratory Workers.

John A. Amyot, M.D., Toronto, Convener.

8.—General Section.

"Diet in Relation to Disease"—Dr. H. B. Anderson, Toronto

Professor V. E. Henderson, Toronto, and Professor Fotheringham, Toronto, will open discussion.

"How Shall Canada Save Her People from the Physical and Mental Degeneracy Due to Industrialism as Seen in the Great

Cities of Older Civilization?"—Dr. P. H. Bryce, Superintendent of Immigration, Ottawa.

Symposium—"Tuberculosis"—Dr. J. H. Elliott, Toronto.

Discussion.

Dr. G. D. Porter, Toronto.

Dr. Harold Parsons, Toronto.

Dr. W. B. Kendall, Muskoka Sanatorium.

Dr. C. D. Parfitt, Gravenhurst.

Miss Dyke, Toronto, and others.

"Prevention of Tuberculosis in the Country"—Dr. H. G. Roberts, Guelph.

"Of What Value Are Sanatoria as a Public Health Measure?"—Dr. W. B. Kendall.

"Open Air Schools for Children"—Dr. J. H. Holbrook, Hamilton.

"The Feeble-Minded"—Mr. J. P. Downey, Superintendent Asylum for Insane, Orillia.

Paper—Dr. W. T. Shirreff, Medical Officer of Health, Ottawa, Ont.

"A Threatened Outbreak of Typhoid Fever in Fort William, and Means Taken to Successfully Abort It"—Dr. R. E. Wodehouse, District Officer of Health, Ontario.

Paper—Dr. H. W. Hill, Director Institute of Public Health, London, Ont.

"Medical Inspection of Public Schools"—Dr. A. P. Reid, Provincial Health Officer of Nova Scotia.

Symposium—"Communicable Disease."

Rhinology, Laryngology and Otology

GEOFFREY BOYD. GILBERT ROYCE.

The Massacre of the Tonsil. By John N. Mackenzie, M.D. Clinical Professor of Laryngology and Rhinology in the Johns Hopkins University and Laryngologist to the Johns Hopkins Hospital. *The Maryland Medical Journal*

During the past few years I have been repeatedly urged by medical friends to give some public utterance by way of formal protest against the indiscriminate and wholesale destruction and removal of the tonsils, which, far above all others, is the chief and most glaring abuse in the laryngology of the present day. They have been good enough to say that a word might not be amiss from one who has been through the dust and heat of the conflict that has raged around this and other fancies in surgical laryngology which have risen and fallen during the quarter of a century that has just passed away.

One of these friends, a distinguished general surgeon of wide experience, large practice and exceptionally high professional skill, in insisting that I say something on the subject, gave me as his deliberate opinion that of all the surgical insanities within his recollection this onslaught on the tonsils was the worst, not excepting the operation on the appendix. And, indeed, when I look back through an experience of over thirty years, in which I have seen theory after theory, for some of which I have been partially, if not wholly, responsible myself, come and go, materialize and dissolve, I feel that, notwithstanding the fact that I approach the subject with reluctance, with diffidence, with hesitancy—with even timidity—and fully mindful of the truth that we are all liable to error, even the youngest of us, and that nowadays in some quarters apparently age and experience count for nothing, I feel I may be pardoned for saying a few words in what I consider to be the interest of the public health, and, therefore, of the public safety.

Let me at the outset be not misunderstood. It is not my object to stir up strife, to impute unworthy motives to anyone, or to arrogate to myself any superior wisdom in the surgical management of tonsil disease.

Nor do I wish to shift to other shoulders all the blame. I, too, in my earlier days, have fallen by the way. Indeed, it was once face-

tiously said that the street in front of my office was paved with the turbinated bones of my victims.

That there are a host of conditions that call for more or less complete destruction of the tonsil is an axiomatic proposition which is not open to discussion. We have all been taking out tonsils for innumerable reasons ever since we entered our special field of work, and we will continue to do so when proper occasion demands it. My contention is simply this, that in selecting our cases for operation we should be guided by a sane and safe conservatism and common sense, and not be carried away by those who, by their precept and example, are fast bringing our specialty into disrepute in the eyes of thoughtful and honorable men.

Many years ago Austin Flint was conducting an examination in physiology at the Bellevue Hospital Medical School in New York. Among the students who came up for graduation was a bright young fellow to whom Flint propounded the following conundrum: "What is the function of the spleen?" And the lad replied that the function of the spleen was to enlarge in malarial fever. To the next question, "What is the function of the tonsil?" the boy declared that the mission of the tonsil was to swell and suppurate in quinsy. "That will do," said Flint, "you have passed a perfect examination, for you know as much about the subject as I do myself." Long before, a distinguished medical luminary on the other side of the Atlantic had said that were he, like Frankenstein, to attempt the artificial construction of a man, he would leave the tonsils out. In other words, at that period, or, as a matter of fact, from a period as long back as memory can run, the tonsil was regarded as a perfectly useless appendage which cumbered the throat, and which, therefore, ought to be gotten rid of. Like its little neighbor, the uvula, it was sacrificed on every possible pretext or when the surgeon did not know what else to do. I remember, a long time ago, in a discussion on hemorrhage after tonsillotomy before a New York society, a distinguished laryngologist made the statement that he had removed without accident many thousands (I have forgotten the exact number) of tonsils—to which declaration an inquisitive, incredulous individual present, with a mathematical turn of mind, said he had made a calculation which showed that in order to have removed that many tonsils within the limit of an ordinary lifetime the operator would have to average a bushel a day.

This general extirpation of the tonsils that obtained in the early days of laryngology received a rude and jarring jolt when, in the last century, it was proclaimed that the tonsil was physiologically directly related to the virility of the male. According to this

luminous conception, which owed its popularity chiefly to the teachings of no less a personage than Chassaignac, destruction or extirpation of the tonsil meant impairment or extinction of procreative power. This doctrine at once made tonsillotomy very unpopular among the male laity; but when the Homeric shock of the battle that raged around this burning question had subsided, and it had been found that there were no facts to support the alleged relationship, then the work of slaughtering the tonsils again went merrily on.

But never in the history of medicine has the lust for operation on the tonsils been as passionate as it is at the present time. It is not simply the surgical thirst from which we have all suffered in our earlier days, just as at a still earlier period we suffered from the measles: it is a mania, a madness, an obsession. It has infected not only the general profession, but also the laity. A leading laryngologist in one of our largest cities came to me with the humiliating confession that, although holding views hostile to its performance, he had been forced to do a tonsillectomy in every case in order to satisfy the popular craze and to save his practice from destruction.

To-day the laity, with or without medical advice, insist on entire removal of the tonsil for almost every conceivable infirmity. If I had time to do so, I could tell you some, if they were not so serious, amusing stories in this connection.

I will only relate one. A few days ago a woman brought her little six-year-old daughter to me to know whether her tonsils ought to come out. Her nasal and throat passages were normal.

The child was in perfect physical condition and complained of nothing. I said to the mother: "Your baby is perfectly well; why do you want her tonsils out?" "Because she sometimes wets the bed."

In the annual reports of nearly all the special hospitals for diseases of the nose and throat the number of tonsil removals, as compared with all other operations on the upper air tract and its appendages, is simply appalling. In conspicuous and refreshing contrast to the usual narrative of these productions let me quote from the last report of a well-known children's hospital in this city these words of sanity and wisdom:

"A large and annually increasing number of cases apply for operation for hypertrophied tonsils, or for adenoids. Of these the adenoids practically all need and receive operation with benefit and without injury.

"The recent universal inspection of the throats of school children

has revealed the fact that nearly all children at some time of life have more or less enlarged tonsils.

"That most of this is harmless if not actually physiological, and that their removal in these cases is not only unnecessary but injurious to the proper development of the child is our conviction.

"The rarity of rheumatism or endocarditis in children, while nearly every child has enlarged tonsils, would indicate that their removal is only exceptionally advisable unless they mechanically interfere with respiration, deglutition, or speech. When this is the case they are still best removed with the tonsillotome unless radical extirpation is necessary for other reasons."

I cannot more correctly express the general attitude on the matter than by quoting the words of Professor Swain of Yale University, in the admirable paper with which he opened the debate on the subject at the last meeting of the American Laryngological Association in Philadelphia:*

"When an author speaks of his experience in upwards of 9,000 cases, mentioning especially 3,000 removed within the capsule within the last six or seven years, the only method which he thinks is really worth the while—he certainly has a right to speak as an expert in regard, at least, to methods. Also, it will be readily deduced that he felt in removing tonsils thus wholly he was not depriving the patients of anything important. When it is the practice in recent years of many operators all over the country to always enucleate the tonsils as completely as possible in all cases, either children or adults, as a routine procedure, it would certainly seem to argue that in general tonsils are better out than in. The question of relative size, appearance, healthiness of structure or any such matter is apparently never thought of. Remove, anyway, and dismiss the matter as not worthy of further consideration. And, again, it is a most excellent condition of things to be operating laryngologist to a busy internist, who takes the entire responsibility of removal. Failure and success are alike credited against him, but it is a case of blissful inexactness which I consider deplorable."

Much wild and incontinent talk, for which their teachers are sometimes largely to blame, has poisoned the minds of the younger generation of operators and thrown the public into hysteria. Tonsillectomy, for example, is held out to them, not only as a sure cure for, but as an absolute prophylactic against rheumatism and heart disease. They are told that with the disappearance of the tonsil in man these diseases will cease to exist. Parents bring nowadays their perfectly sound children to the laryngologist for tonsil removal in

*See Transactions, 1911.

order to head off these affections. Tonsillectomy is recommended as a curative during the agony of acute articular rheumatism.

But the origin of the latter disease has recently been traced to an infection of the nasal mucosa following operation. To-morrow it will come from somewhere else. Those of us who are old enough to remember will recall the story of chorea. Years ago we found the cause of this affection in the nasal passages. When this view, after the usual struggle, had to be abandoned, it was suddenly discovered that the eye was the portal of entrance. To-day it has been caught in the tonsil. If we exercise a little patience it will turn up soon in some other organ.

In considering the question of operation on the tonsil, and especially complete removal, we must face the following facts:

I. The functions of the tonsil are, in the present state of our knowledge, unknown.

Whether they are portals of entrance or avenues of exit for infection, whether they protect the organism from danger or invite the presence of disease, whether the pathogenic bacteria sometimes found in them are coming out or going in, whether they are manufacturers or storehouses of leuco—or lymphocytes, whether they represent the extreme outlying protective ramparts and that, therefore, their destruction would mean the removal of the battle-line against infection from the throat to the neck lymphatics, whether the efferent current of lymph exceeds the afferent in volume or velocity, whether, which seems probable, there is an endless flow of lymph from their interior to the free surface, which, unchecked, prevents the entrance of germs from the surface and washes out impurities from within, whether the organ possesses an internal secretion, *sui generis*, or whether, in fine, the tonsil structure is in any way essential to the well-being of the individual, are questions which have as yet received no definite solution, but which are full of interest and furnish material for instructive discussion and debate. Until the functions of the tonsil are known the final word on its removal cannot be spoken.

II. Whatever its functions may be, and the production of leucocytes is undoubtedly one of them, the tonsil is not, as is generally taught and believed, a lymphatic gland.

The general ignorance of this fact had led to the useless sacrifice of thousands of tonsils, on the fallacious assumption that their functional activity may easily be replaced by the myriads of other lymphatic glands in the body. The physiological integrity of the tonsil is of the utmost importance in infant and child life. The gland appears early in embryonic life (fourth month), attains

maturity at the end of the first year of infancy, and at or about puberty tends to diminish in size. It does not develop as a lymphatic gland from a plexus of pre-existing lymph vessels in the mesothelium, but as an ingrowth of endothelium from the second branchial pouch, and, therefore, in its origin must be classed with the thymus and the thyroid, the former originating from the third, the latter from the fourth, while the parathyroid takes its origin from the third and fourth branchial pouches, all by inbudding of the endothelial lining of the primitive pharynx. These anatomical facts have been recently emphasized by Gordon Wilson,* of Chicago, who, in a careful study in comparative anatomy, has shown from various relations which the tonsil shows to the pharynx that the tonsil secretes or excretes a substance into the pharynx. The tonsil is present in all mammals, with a few exceptions, notably the white rat, and its anatomical arrangement is such that no matter how concealed it may be by folds of membrane it always retains communication with the pharynx. Observations made in his laboratory on the carnivora show that in this genus the tonsil is often so protected by folds as to be invisible from the mouth; but there always exists a channel of communication. This is well shown in the lion, where the tonsil lies in an elliptical sac of considerable size, which is so placed that during certain movements of the pharynx the contents may be expelled into the back of the mouth. In other words, we have here a structure which plays a rôle of importance in early life, in addition to its production of lymphocytes, and which necessitates a close relation to the pharynx. This rôle may be of infinite value to the infant in his earliest days of life, but which, as he grows through childhood into manhood, he is able to dispense with.

Now, the first organ to manufacture or store leucocytes in embryonic life is the thymus gland (Jacobi).† In view of the origin of the tonsil from the branchial pouch, is it not conceivable, as Jacobi suggests, that it may assume the rôle of the thymus after birth, or when the latter gland ceases to functionate or disappears?

III. It is rarely possible to separate the tonsil from its neighborhood during the acute invasion or rapid progress of a microbic or toxic poison (Jacobi).

Years ago Jacobi called attention to the fact that in cases of membranous throat disease, whenever the membrane is limited to the tonsil, there is little or no glandular swelling in the neighborhood. If the membrane extends from the tonsil to its neighborhood, or starts at a distance from the tonsil, neighboring lymphatics swell at once.

*Transactions of the American Laryngological Association, 1911, p. 263.
†*Archives of Pediatrics*, July, 1906.

Again, the treatment of this neighborhood shows its effect almost immediately in the swollen glands. This is especially true of diphtheria, which, when limited to the tonsil, produces less adenitis and constitutional symptoms, and, therefore, is less dangerous. We all remember, too, in the days before antitoxin, how much graver the prognosis was when the membrane appeared in the nose and upper pharynx than when it appeared on the tonsils. Nearly every case died.

IV. The rôle of the tonsils as portals of infection, like all new doctrines in medicine, has been greatly exaggerated. To state that they are, in certain cases, the avenues through which pathogenic organisms reach other organs is simply to state an incontrovertible proposition, in the light of present-day research. But to make them responsible for the long Iliad of woes which has been laid to their account is to remove the whole question from its legitimate place in the region of cold clinical fact into the atmosphere of fads and fancies. Some absorption takes place in and from the tonsil, but it is far less than that which occurs in the more abundant and receptive lymphatic structures of the nose and nasal pharynx. The tonsil, moreover, is not built anatomically as a gateway of infection. I have not time to go into a review of this interesting subject, but will simply quote, with some modification, from a summary by Faulkner, of Pittsburgh (*Medical Record*, July 9, 1910), based on an analysis of observations made by Most, Retterer, Labbé, Hodenpyl, Jacobi, Grober and others, and also refer you to a symposium on the subject of the naso-pharyngeal lymphatics and their relation to other parts of the body, by Hartz, Poli, Logan Turner and Broeckart:*

"The faucial tonsils are peculiar organs. They possess an anatomical character different from other tonsils and other lymphatic tissues. They are innocent organs with functions chiefly confused by medical literature. Their blood supply is scant and they have almost no communication with the lymphatic system. * * * Their crypts are lined by mucous membranes having the ordinary function of other mucous membranes, so far as known. They are distinctly separated from the very active absorptive and bacteriolytic structures of the fauces, pharynx and nose. Their position is a segregated one. Their external deep surface is covered by a dense fibrous capsule which sometimes sends a network of fibrous tissue as outrunners along the tonsillar blood vessels (Hodenpyl), the tonsil contains a system of closed lymph canals in the follicles

*These papers have been collected, the foreign ones translated into English, and published in the *Laryngoscope*, March, 1912.

which do not open into the connective tissue reticulum (Retterer, confirmed by Hodenpyl), diphtheritic membrane confined to the tonsil is relatively innocent (Jacobi). There are no lymphatic sinuses around the tonsil, and the nearby lymph current is less active than that of the pharynx at some distance (Labbé), and, finally, injections made into the region of the tonsil (not even into the tonsil itself) do not spread like those made into other parts of the nasopharynx (Labbé, Retterer, Hodenpyl, Most and Jacobi)."

Hartz,* in reviewing the important experiments of Lenhardt, says: "These experiments would lead to the assumption that the tonsils are frequently infected secondarily to acute infection of the nose and the accessory cavities and the nasopharynx. * * * * It is probable that every inflammation of the mucosa induces a swelling, often imperceptible, of the neighboring lymphatic glands of greater or less extent, which, acting as a protective mechanism, inhibits the development of the germ. To the tonsils, which have the function of an open lymphatic gland, may be ascribed a protecting influence against the micro-organisms which are ever present in the mouth and nasopharynx, acting, also, as a barrier against their invasion into the trachea and esophagus. On the other hand, it must be admitted that the tonsils are frequently the seat of primary inflammation, and that they are more susceptible to disease than other membranous structures in this region."

The question has two sides—a purely bacteriological and a purely clinical one. If we consider the vast extent of the area through which infection can possibly take place, and if we follow the lead of experiment and that of the pure bacteriologist to its extreme limit and logical end, we may find that nothing short of the guillotine or the axe will insure the patient against absolute and certain immunity from infection through the throat.

On the other hand, when we consider the fact that there are constantly loitering around the oro and nasal pharynx—this region is the clubhouse of the streptococcus—a miscellaneous crowd of pathogenic bacteria, and when we consider the further fact that thousands of operations are done in these regions every day, and necessarily without antiseptic precautions, is it not significant at least that we meet with so little sepsis following their performance?

V. The chief practical lesson to be drawn from the foregoing facts is that in cases in which the throat, and particularly the tonsils, is apparently the starting point of infection, it is mandatory to examine the entire upper air tract and not be content with appearances that are visible to the eye through the open mouth alone. How many stop their search for the cause at the tonsil and fail to

* *Laryngoscope*, March, 1912, p. 180.

explore the deeper parts of the pharynx, the retro-nasal space, to say nothing of the nasal passages and accessory sinuses? This entire region must be reckoned with, and failure to do so has probably sent more than one to his grave. I know of a number of cases of fruitless removal of the tonsil which have only gotten relief when treatment was subsequently directed to the nasal cavities and post-nasal space. Not to mention many others, I am forcibly reminded of a case of general poisoning and wrecked health in a young woman in whom I had thought I had traced the source of infection to an antrum maxillæ empyema. As there was no escaping pus, my diagnosis was not accepted by the family and attendant, and I was not even permitted to make an exploratory puncture. I am unable to say what operation, if any, was done, as she naturally passed out of my hands. But as she grew rapidly worse, and as the futility of the treatment became apparent, my advice was finally reluctantly and doubtfully taken, the antrum was opened, the fetid contents evacuated, and the patient, under appropriate treatment, went on to speedy and complete recovery.

I could tell you, also, of cases in which the tonsil has been held responsible for the morbid condition, and has been partially or completely removed, in which relief has only been secured by the discovery and treatment of disease in the nose and retro-nasal space. And of far graver, far-reaching and deeper significance are cases of infection in which life has doubtlessly been sacrificed by clinging to the lazy and stupefying delusion that the tonsil is the sole portal of poisoning.

VI. The hypertrophied lymphatic tissue of the vault of the pharynx (adenoids) does harm chiefly through obstruction. Restore normal respiration in the child, and in a large number of cases the tonsils will take care of themselves. Even if the glands should remain large, if they are giving no trouble, they may be safely left *in situ*, for as their growth does not go on *pari passu* with the growth of the rest of the pharynx, the time soon comes when they become inconspicuous in the fully developed fauces.

The mere size of the tonsil is of itself no indication for removal except it be large enough or diseased sufficiently to interfere with respiration, speech or deglutition, in which case it, or a sufficient portion, should be taken away without delay. A large tonsil does not mean necessarily a diseased tonsil, nor does a small tonsil always indicate a healthy organ. Tonsils apparently diseased may consist of normal tissue, and, on the other hand, perfectly normal-looking glands may be found pathological microscopically. The tonsil may be greatly enlarged, may extend far down into the pharynx or be

buried deeply in the palatine arcade, and yet not interfere with the well-being of the individual. Such tonsils are the special prey of the tonsillectomist. If they are not interrupting function, they had best be left alone, for they are doing no harm. The change in anatomical relations after operation is often so great that function is crippled more after their complete removal than it was before. Moreover, it occasionally happens that the resurrection of a "buried" tonsil is followed by the burial of the patient.

A most interesting and instructive part of this subject is the occurrence of tonsil disease, with or without cervical adenitis, from infection from the nasal passages (from pus cavities, operations, etc.) and the improper care of the teeth during dentition. Wright* of Boston reports a remarkable series of 150 cases in which operation on the tonsils was deferred until after the eruption of the molars, not only in the six, but in the twelve-year period, and when dentition had been completely accomplished the enlarged cervical lymphatic glands disappeared, together with the swelling of the tonsils.

Tonsillitis not infrequently follows operations on the nasal cavities, especially if pus be present, or even after a cold in the head. Experimental work along this line would seem to indicate that infection takes place through the lymphatics. Thus, in the carefully conducted experiments of Lenhardt† it was found, among other things, that foreign matter, even when injected into the mucous membranes of one nasal passage, was found in both tonsils a short time after the injection.

The practical illuminating lesson of these observations is that if, in infancy and childhood, we pay more attention to the neglected nasal cavities and to the hygiene of the mouth and teeth, we will have less tonsil disease and fewer tonsil operations.

VII. In the permanent removal of tonsil disease equally good, and in the long run even better, results may be obtained in a large percentage of cases by measures less radical than those usually employed at the present time. Out of a multitude of examples, take the case of recurring quinsy, for which complete enucleation is done. In this condition it has been found that it is frequently only necessary to thoroughly slit up and shrink the upper lobe of the tonsil. Most quinsies occur in this situation, and the destruction of that part of the tonsil is all-sufficient to prevent recurrence. By this method enough of the organ is left to entirely perform its function, and the ultimate development of quinsy of the lateral columns of the pharynx, which follows sometimes complete removal, is avoided.

Boston Medical and Surgical Journal, May 20, 1909.

†*Archiv f Laryngologie*, 1909, Bd. XXI.

VIII. I do not propose to enter the perennial and monotonous controversy of tonsillotomy versus tonsillectomy. Each operation has its legitimate indications and aims. I do not intend to discuss them. I will only say, in passing, that enucleation of the tonsil, with even the removal of its capsule, if so desired, complete enough for all practical purposes, and this fact should be generally known, practically free from danger and with equally, and in some instances better results, can be done with the guillotine or one of its modifications. In the majority of cases this procedure will be all-sufficient. It is a much simpler method, especially in children, and it is not handicapped by the danger of complete enucleation, with its many accidents and complications, to say nothing of its long roll of unrecorded deaths. To subject a child to the latter operation, with all that it entails, when we have very much safer and practically just as efficient measures at hand, is, to say the least, bad judgment and unnecessary surgery.

As I see this part of the subject in the light of my own experience, and in the experience and observation of others, the truth is slowly but surely dawning, and at no distant day will irresistibly emerge into recognition that the so-called complete enucleation—the chief objection to which is that it can never be made complete—except in individuals in whom the organ is totally diseased, is an unnecessary operation in the great majority of cases in which it is at present done, and may be supplanted by many other methods which are perfectly safe and efficient and not open to its many serious objections. That the tonsil has some important mission to fulfil is furthermore shown from its frequent reappearance after enucleation—a protest, as it were, on the part of nature against the total destruction of its functions, and the vicarious activity of the neighboring lymphatic tissues when its physiological properties cease to exist. This is strikingly shown in the case of quinsy of the lateral columns of the pharynx, before referred to, when the tonsil is rudimentary or gone. In the case, too, of infectious disease, whose poison is eliminated by the throat, this compensatory action is most marked. Thus, in the malignant epidemic of tonsillitis which occurred last year in Boston, in which the disease was not contagious, did not start from a septic focus in the throat, but was introduced through the food supply (milk), after much constitutional disturbance, the whole tonsillar ring, as Coolidge* expresses it, broke into flame at once. The patients whose tonsils had been removed did not escape the process in the pharyngeal lymphoid tissue, the constitutional symptoms or the cervical adenitis.

*Transactions American Laryngological Association, 1911, p. 272.

IX. The tonsils are phonatory organs and play an important part in the mechanism of speech and song. They influence the action of the surrounding muscles and modify the resonance of the mouth. On the other hand, they may be so enlarged as to cripple both these functions, and should, therefore, be removed, such removal being sometimes a gain to the voice of one or more octaves. In tonsillectomy no one can foretell the amount and character of change in the anatomical relations of the parts, no matter how skilful the surgeon is or how skilfully the operation is performed. The adhesions and contractions left after this operation, even in the best of hands, lead often to deplorable changes in the quality and ruin of the singing voice. I should certainly hesitate long before advising such an operation in a great singer or anyone dependent upon the voice as a means of livelihood. The operation of tonsillectomy is a capital operation, a dangerous operation, and should only be done in a hospital or other place where every facility is at hand to meet the gravest possible emergency. It should only be done by a surgeon skilled in its performance and thoroughly equipped for every accident, and with a mind fully awake to the possible fatality which has so often followed as its result.

X. One word, again, to those who will fail to grasp the meaning of these remarks. It is not my object to decry in the least degree the many excellent measures which modern ingenuity has devised for the surgical treatment of tonsil affections. No one resorts to them with more alacrity than myself when the necessity for their adoption is apparent.

It is not my purpose to assail operation for definite and legitimate cause, but to warn against the "busy internist," as Swain so aptly terms him, who is too busy to waste his time with such trifles as differential diagnosis or diagnosis by exclusion, and his accommodating tonsillectomist, who, whether he admits it to himself or not, cares less about the cause of the trouble, as he is in the business for revenue only.

We who are teachers of laryngology should wake up to the responsibilities of our position and see to it that our pupils shall not leave our institutions or post-graduate schools until they are taught, on the one hand, conservatism and moderation in the surgical treatment of the simpler affections of the upper air tract, and, on the other hand, thoroughness and completeness when brought into the presence of situations of graver emergency. The problem, though difficult, is not impossible of solution. The cure for the evils I have been discussing is largely educational. While impressing upon our students the absolute necessity for surgical measures in proper cases,

we should at the same time make the dangers of their indiscriminate performance fully apparent. In this way only can we be reasonably sure of accomplishing the desired result. The error of first impression derived from teacher and text-book is often difficult of eradication. In the lecture-room, in the clinic, in our daily walks with the student, let us make that first impression a good one.

But equally, if not more, responsible for the deplorable state of affairs which exists to-day in the matter under discussion are the teacher of internal medicine and the general surgeon. When pre-eminent authority proclaims in lecture-room and text-book as indisputable truth the relationship between a host of diseases and the tonsil of the child, and advises the removal of the glands as a routine method of procedure, what can we expect of the student whose mind is thus poisoned at the very fountainhead of his medical education by ephemeral theory that masquerades so cheerily in the garb of indestructible fact? How are we to offset the irresponsibility of the responsible? But we hear on all sides, "Look at the results." Results? Here is a partial list from the practice, not of the ignorant, but of the most experienced and skilled: Death from hemorrhage and shock, development of latent tuberculosis in lungs and adjacent glands, laceration and other serious injuries of the palate and pharyngeal muscles, great contraction of the parts, removal of one barrier of infection, severe infection of the wound, septicemia, troublesome cicatrices, suppurative otitis media and other ear affections, troubles of vision and voice, ruin of the singing voice, emphysema, septic infarct, pneumonia, increased susceptibility to throat disease at the seat of operation, pharyngeal quinsy, and last, but not least, tonsillitis!

Who, may I ask, is in the better position to advise, the surgeon or practitioner who, without sufficient knowledge, lightly recommends complete enucleation of the tonsils, or those who have devoted their lives to the study of throat conditions, and who come in daily contact with its disastrous and often fatal end results? Formerly it was the nasal septum; now it is the tonsil that is the surgical objective of every beginner in laryngology, and a tonsillectomy is usually his first baptism of blood. This operation is done all over the land by operators of all kinds, and, if the truth were known, with great mortality. The amount of reckless surgery done in this field will never be known or chronicled in the pages of medical literature, but it may be found in its abiding-place in the book of the recording angel.

Let us hope that the day is not far distant when not only the profession, but the public, shall demand that this senseless slaughter

be stopped. Is not this day of medical moral preaching and uplifting a fitting one to lift the public out of the atmosphere in which it has been drugged, and for the reckless tonsillectomist a proper time to apply the remedy of the referendum and recall?

We are going through to-day in laryngology what the gynecologist went through years ago. The ovaries were removed then under as little provocation as the tonsils are being taken out to-day. The so-called "tonsil question" is one of simplicity and comparatively small dimensions when viewed in the light of sanity and common sense, but it has been made to assume formidable proportions by unsound observation and reckless surgery. It has come to a point when it is not only a burning question to the profession, but also to the public. This senseless, ruthless destruction of the tonsil is often so far-reaching and enduring in its evil results that it is becoming each day a greater menace to the public good. Until we have more definite knowledge concerning the use of the tonsils no one can tell the damage done to the children of the present generation or the influence of wholesale tonsil removal on the children of the next. Whatever a more exact examination of the tonsil may reveal as to its function, I believe it was placed in the throat, not with evil, but with good intent; to serve a teleological rather than a pathological purpose; that its mission is physiological, and that it was not designed by Nature as a natural, easy and convenient avenue of infection. It is, of course, not open to debate that there are a multitude of conditions that call for partial destruction or more or less complete removal of the tonsils, but radical operation should not be done without definite and sufficient reason. The tonsil should not be sacrificed any more than any other organ without convincing evidence that it is the cause of the disease to be removed.

Hasty theory, which sees in destruction of the tonsil the only means of treatment, and which, unmindful of the lymphatic and other anatomical arrangement of the neighboring structures, and their physiology, and which, losing sight of the further fact that it is hard, if not impossible, to determine during life that the tonsil is the only avenue of entrance in a given infection, throws differential diagnosis to the winds, should have no part in modern scientific laryngology. When we shall clarify the atmosphere of our ideas in this matter, and when sane authority shall demand a halt, then we will hear less of the massacre of innocent organs and have less frenzied literature on the subject.

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COMMENT FROM MONTH TO MONTH

Man's Inhumanity to Man is not to be compared to man's inhumanity to woman. Burns had in mind mankind in general when he conceived this phrase. Had he known of a specific case where a man had neglected to engage professional attendance for his wife in her approaching confinement, or could he have conceived of a man failing to provide for the professional fee in an emergency call upon that wife, especially at night time, he might have written man's inhumanity to woman.

Each man's humanity is a nature and a law unto itself: and the man who fails to provide against emergency sickness in his household is not deserving of a very great deal of sympathy from the general public.

It is easy to cry "close corporation" and point the finger of scorn at the entire medical profession when one member thereof seems to fall from the pedestal of professional ethics and follows the dictates of his own human nature.

Practically all the members of the medical profession are sympathetic and true. Their deeds speak far louder than any mere written words. They are not given as a class to advertising their good deeds from the house tops. They are the pioneers and ardent workers in the cause of preventive medicine which slashes into and cuts out chunks from their professional incomes. They never pause to think of the reason of it. They simply work away and do it.

Very few fail to respond to a call when they are plainly and simply told the case is one of charity. This is their humanity.

As to "close corporation"—where is it? Surely not in a professional field which is the stamping ground for charlatans, fakirs and cults of every variety and description. It is a joke to call the medical profession a "close corporation," when that profession is parasitized as it is.

Are Tea and Coffee Harmful? This is the title of a symposium in the *Medical Times* for September, 1912. All have been of the opinion that if these beverages, same as alcohol, were abused, they were harmful. Most of us consider them harmless in moderation.

Caffeine is the principal alkaloid in both tea and coffee. Therefore, exact studies of the amount of caffeine in a cup of tea or coffee are of interest as well as important.

Prof. J. W. Wallet, of the University of Virginia, who has recently made exhaustive studies says that in one cupful of hot, black tea there are 1.54 grain of caffeine; green tea, cold—a glassful—2.02 grains; coffee—cupful—with hot milk, three-fifths coffee, 2.61 grains; coffee, "black," demitasse, 1.74 grains.

This would prove that black tea and coffee with milk would be the safer beverages to drink. It can readily be computed just how much caffeine is taken into the system with two or three cups of either at a meal or in the course of twenty-four hours; and it will be worth while to know what is the maximum amount of either that can be drunk safely daily and what effects upon various organs of the body excessive doses of caffeine have.

Pilcher has found that therapeutic doses increase cardiac tone, the vasomotor centre stimulated, vascular relaxation, sometimes raised blood pressure, usually a more rapid blood flow. With larger doses there is decrease of cardiac tone, vascular relaxation and a lowering of blood pressure. In excessive doses death takes place by cardiac dilatation.

The abuse of tea or coffee, therefore, will prove harmful to the normal heart, whilst small quantities may prove helpful when the heart is dilated.

In severe intoxication from alcohol Pilcher finds caffeine of no value, but helpful in mild intoxication.

Some of the disorders following in the train of caffeine are nervousness, feverishness, headache, irritability, dyspepsia and disturbance of sleep. One writer considers it an etiological factor in chronic nephritis.

One to four grains of caffeine *per diem* does not appear to cause any appreciable alteration in the quality or quantity of sleep, but above this the sleep is neither so sound or refreshing as it should be. So the person drinking more than two cups of coffee or three of black tea is verging on the border line of abuse.

As caffeine is not a food to nerve or muscle tissue, but a stimulant pure and simple, demands upon reserve force by repeated stimulation will tend to exhaustion and perversion of function. It is well, therefore, not to use tea or coffee regularly day in and day out, but to allow time for its elimination. This offsets its cumulative action in the tissues.

Individual opinion is both valuable and interesting.

Harvey W. Wiley believes that all caffeine beverages are harmful in varying degrees, depending upon the age and physical condition of the drinker, idiosyncratic tendencies, and the manner and quantity in which they are used, but the almost universal use of these beverages shows they do not produce very serious lesions. Caffeine, nicotine and alcohol has had much to do in creating the large number of neurotics found in the world to-day. Excessive drinking of tea and coffee, especially upon an empty stomach, is to be condemned.

Tom A Williams says special susceptibility is sometimes very great and instances cases where caffeine has proven poisonous even in small doses. People early learn, however, of this special susceptibility.

F. H. Barnes, of the Dr. Barnes Sanitarium, does not consider tea and coffee harmful if used in reasonable quantities; nor can he remember a case where they have been the cause of a neurosis or a psychosis. He believes there are too many extremists and alarmists in the medical profession.

On the other hand Solomon Solis Cohen, whose opinion must also carry weight, states they are harmful except when prescribed for definite purposes in the treatment of the sick. Most physicians cut them off in the case of the sick, even though the sick often crave for a cup of tea. Cohen believes one will escape serious injury, however, if he controls his appetite and keeps his daily allowance down to one cup of moderately weak coffee, diluted one-half with hot milk, in the morning, and one-half cup of black coffee—but a weak decoction—after dinner.

J. H. Kellogg, of the Battle Creek Sanatorium, answers the question of harmfulness by saying, "Yes, decidedly so." Tea and coffee are poisonous drugs. They are, in his opinion, the cause of, or lead to hardening of the arteries, among the results of which are Bright's disease, heart failure, apoplexy and premature old age. The mis-

chief done by tea and coffee is exceeded only by the harm caused by alcohol and tobacco. Tea and coffee are baneful drugs and their sale and use ought to be prohibited by law.

Superintendent Barnes and Superintendent Kellogg have very divergent views. Perhaps "There's-a-Reason."

What the people want to know from the medical profession about coffee, tea, alcohol and tobacco is the maximum quantity which can be partaken of daily without injury to their economies. There will always be some who will abstain from one, two, three or the whole all the time; and it is equally true there will always be some who will partake of one, two, three or four for all time. The total abstainers want no scientific knowledge upon the subject. The others want to know what quantity can be consumed without danger to themselves or their progeny.

The Massacre of the Tonsil, published in full on other pages of this issue, is so sane, so timely, and so important in its pronouncements that it is adjudged worthy of reproduction so as to give it as wide circulation as possible.

Coming from an undoubted, authoritative source at a time when medical inspectors, many practitioners and others have gone mad with an insane desire to rip the tonsil up the back, no matter what the cost, it cannot fail to make a profound impression upon all, and, indeed, upon those even who would harass, fine and imprison people who would fail to bow down and worship this golden calf of latter-day surgery.

Whilst laying no claim to any extended or far-reaching observations upon tonsil disease, there must be many practitioners of medicine who have, time and again, seen many tonsils right themselves as time went by under simple treatment. There must be many, too, who have often treated diseased tonsils successfully without hasty reference to the surgeon's hands, and had the joy of seeing them restored to their natural functions, whatever they may be, without running the danger to life and other diseases which these operations assuredly entail.

It was high time someone called a halt, and it is exceedingly satisfactory that the call has issued from one so eminently qualified by knowledge, experience and position.

The pronouncement has been deemed so important by the Editor of the *Maryland Medical Journal* as to call for reproduction in its September issue, an almost unheard-of proceeding in the history of medical journalism.

EDITORIAL NOTES

WELLESLEY HOSPITAL.

The new Wellesley Hospital, erected on the site of the well-known "Homewood" property of Mr. Frederick Nicholl at the head of Homewood Avenue, was formally declared open for public service on the morning of the 27th of August by H. R. H. the Governor-General.

H. R. H., accompanied by Princess Patricia, Miss Pelly, Col. Lowther and Capt. Long, drove up to the entrance to the hospital shortly before 12 o'clock and were received by Lieut.-Governor Sir John Gibson, with whom were Bishop Sweeny, Bishop Reeve, Canon Dixon, Sir William Mulock, President of the new institution, Mr. E. B. Osler and other distinguished gentlemen.

Following an address by the Lieutenant-Governor, in which he explained the objects of the hospital, H. R. H. said:

"Sir William Mulock, ladies and gentlemen: when you and Dr. Bruce asked me last May to open this hospital in August it gave me great pleasure to accede to your invitation, and I congratulate you on being ready for the opening to-day.

"As you have justly remarked—In England, Europe and the United States, they have many private hospitals for the accommodation of people whom it is inadvisable to treat in their homes. This hospital should be of great advantage to people in that condition who can afford to pay for medical attention. They can get here just as efficient treatment as could be obtained in any public hospital with the added advantage of absolute privacy.

"The Duchess obtained great benefit in a private ward in the Royal Victoria Hospital at Montreal, and it is my sincere wish that all who come to this institution may receive as good treatment and may make as good a recovery."

The Lieut.-Governor explained that the hospital was to be devoted exclusively to the care of paying patients.

"It is furnished with all the accessories and equipment of a modern hospital," he said, "but with the privacy and comforts of a home. On the top of the building is a roof garden, sufficiently large to accommodate all the patients. Nearly all the rooms have a southern aspect, so that even patients who are in bed can be wheeled to the windows to benefit by the rays of the sun.

"There is no regular visiting staff, as each patient will be attended by his or her own physician or surgeon. The hospital is

open to all physicians in good standing and surgeons who confine their practice to surgery.

"We are fortunate in having secured the services of Miss Elizabeth G. Flaws as Superintendent. Miss Flaws graduated in the Toronto General Hospital some years ago, subsequently held an important post in the Lakeside Hospital, Cleveland, and later was Superintendent of the Kingston General Hospital."

Following the official ceremony the royal party were conducted through the hospital and expressed the highest appreciation of the building itself and its splendid equipment.

MONTREAL'S DEATH AND BIRTH RATE.

The annual report of the Medical Officer of Health of Montreal shows that the birth rate in that city in 1911 was 37.49 per 1,000 of the population and the death rate 21.19 per 1,000. These figures represent a gain in births of one per cent. over 1910, and a decrease in deaths of one and one-fifth per cent. The total deaths for 1911 were 9,974. The births numbered 17,637, which places Montreal very high in natal statistics.

DRINKING AND SMOKING INCREASING IN CANADA.

For the fiscal year ending 31st March, 1912, Canada consumed spirits, beer, wine and tobacco per capita as follows: 1.030 gals., 6.598 gals., .114 gals., 3.679 lbs. This shows a decided increase, when compared with those of the previous year: Spirits, .941 gals.; beer, 5.959 gals.; wine, .112 gals.; tobacco, 3.202 lbs.

How is this to be explained in the face of many local option municipalities and a militant temperance movement?

CONGRESS ON HYGIENE AND DEMOGRAPHY.

The Fifteenth International Congress on Hygiene and Demography will be held in Washington, D.C., September 23rd to 28th, 1912. The President of the United States is Honorary President of the Congress. Dr. Henry P. Walcott of Massachusetts is President, and the Secretary-General, Dr. John S. Fulton, of Maryland.

This Congress will probably be the largest gathering in the interest of public health ever held. It will be the first time in the half-century's history of the Congresses that one has been held in the United States and probably the last for a generation. The fee for membership is $5.00 and copies of the proceedings are only available for members.

News Items

Dr. A. L. Danard, Owen Sound, is in London, England.

Dr. Kaufmann, Montreal, has sailed for Europe.

Regina is to have a new isolation hospital.

Dr. Hill, of the University of Minnesota, has been appointed Superintendent of the Hygienic Institute at London, Ontario.

In the past five months there have been fifty-four deaths in Toronto from whooping cough; scarlet fever, thirty-two deaths.

Drs. E. S. Harding, Montreal; E. D. Ault, Acton, Ont., and J. G. Hands, Victoria, B.C., are in London, England.

Dr. Wm. Burden, Trinity '95, Rochester, N.Y., has been visiting in Toronto and other points in Ontario.

Dr. W. S. Harrison, will represent the Toronto Board of Health at the Hygienic Congress in Washington.

Dr. Allan Cameron, Owen Sound, Ont., died on the 6th of September, aged eighty-three.

Dr. Bruce Hewson, Trinity '95, formerly of Colborne, Ont., is now practising in Peterboro.

Dr. Tait Mackenzie, Philadelphia, formerly of Montreal, has been a guest of Lord Aberdeen.

Drs. W. B. Howell and I. C. Sharp, Montreal, have returned from Europe.

Dr. Geo. W. Badgerow, London, England, is visiting his old home in Toronto.

Dr. J. D. McDonald, formerly of Lion's Head, Ont., is located in Regina.

Dr. George Elliott has moved to 219 Spadina Road.

A new hospital is being erected at Weyburn, Sask., at a cost of $50,000.

Dr. Douglas, M. O. H., Winnipeg, has returned from a trip East.

Dr. R. T. Rutherford, an old Stratford boy, practising at Strathclair, Man., has been appointed Medical Inspector of Immigration at the port of New York for the Dominion of Canada.

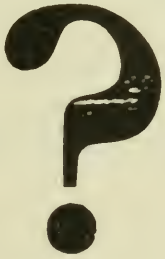
Winnipeg now has a Children's Hospital, the first in Western Canada. H. R. H. the Duke of Connaught opened the hospital on the 17th of July.

Dr. Hugh A. MacCallum, London, Ont., has been elected President of the Canadian Medical Association, which will meet next year in London.

In August there were 304 deaths in Ontario. Infantile paralysis, 15 cases, 8 deaths; spinal meningitis, 13, 13; smallpox, 31, no deaths; scarlet fever, 140, 10; diphtheria, 193, 27; measles, 64, 3; whooping cough, 348, 30; typhoid fever, 1,022, 94; tuberculosis, 179, 119.

A most successful public health exhibit was that at the Canadian National Exhibition this year. It was in charge of Dr. J. W. S. McCullough, the Chief Officer of Health of the Province of Ontario, and from the vast crowds who inspected it, it may be certain the public are taking an exceeding great interest in matters of a public health nature.

Summer Diarrhea.—H. Heiman (*Am. Jour. Obs. and Diseases of W. and C.*) advises an initial cathartic of castor oil or milk of magnesia in the non-inflammatory, milder cases. Milk should not be given from twenty-four to forty-eight hours. Upon cessation of the diarrhea give diluted skimmed milk, barley water and sugar in gradually increasing quantities. In most cases astringents are unnecessary. If, after the thorough removal of the decomposed products causing the dyspepsia, diarrhea continues, 5 to 10 grains of bismuth may be given in mucilage of acacia every one to two hours. With abdominal pain, cramps, restlessness and watery diarrhea, he advises five to ten drops of paregoric. He reports favorably upon "Eiweiss Milch," which consists of casein and buttermilk.



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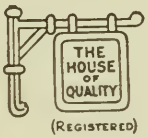
Publishers' Department

THE PALLID SCHOOL GIRL.—In view of the modern methods of education, which force the scholar at top speed, it is not to be wondered at that the strenuous courses of study prescribed for the adolescent girl more than frequently result in a general breakdown of both health and spirits. Each winter the physician is consulted in such cases and almost always finds the patient anemic, nervous and more or less devitalized. In most instances a rest of a week or two, together with an efficient tonic, enables the patient to take up her school work again with renewed energy. Pepto-Mangan (Gude) is just the hematinic needed, as it acts promptly to increase the red cells and hemoglobin, and to tone up the organism generally. It is particularly suitable for young girls because it never induces or increases constipation.

THE MODERN TREATMENT OF SYPHILIS. By Dr. Martin Friedlander, Director of Lassar's Clinic, Berlin. *Folia Therapeutica*, page 89, July, 1908. More recently, as we were compelled to make use of the internal treatment in a series of cases, our attention was directed towards a new preparation called Mergal. This substance is a cholic acid-mercury oxide combined with tannate of albumen and is dispensed in small, easily taken capsules. It has already found numerous advocates, and we have ourselves used it in appropriate cases. We are able to state that it is well borne, has proved itself powerfully active against syphilis, although the inunction and injection methods remain the routine practice. This organic mercury preparation, Mergal, has however, the advantage over the other and inorganic mercury preparations, that it is easily assimilable, and in no way irritates the alimentary canal. Patients can remain long under this method of treatment quite comfortably, and do not suffer from the disagreeable inconvenience attending other methods, and this, in the case of better-class patients, is a matter of the highest importance. Mergal is supplied by Henry A. Rowland, Toronto, Ontario. Canada Agent for Riedel & Co., of London, England, and Berlin, Germany, and who will be pleased to submit samples of their products for clinical tests.



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Pituitrin in Difficult Parturition.—Much attention is being given by the medical press of Germany and other European countries to the importance of Pituitrin as an oxytocic. The drug has been somewhat extensively used for the past two or three years, both here and abroad, chiefly, perhaps, as a hemostatic and heart stimulant. Now it is known to be of great value in uterine inertia, obstetricians in many of the German hospitals and elsewhere who have thoroughly tested it clinically pronouncing it a truly remarkable oxytocic. For the benefit of practitioners who may not be familiar with its origin and nature, it may be explained that Pituitrin is an extract of the posterior or infundibular portion of the pituitary gland. Although the psysiology of this gland is as yet largely speculative, there seems to be no doubt that it contains a substance or substances that exert a considerable influence over the metabolism and on the cardio-vascular system. As bearing upon the value of Pituitrin in parturition, this expression from Dr. Emil Vogt, of the Royal Gynecological Clinic at Dresden, is significant: "The oxytocic action of Pituitrin at this clinic was observed in over one hundred cases. After the rupture of the fetal membranes, in the second stage of labor, the physiologic effect of Pituitrin is the most pronounced; the contractions of the uterus follow each other much more rapidly and energetically, and the intervals between pains are decreased. Individually the pains are not more severe, so far as suffering is concerned, even in the case of sensitive women, than they would be in a normal delivery. In half of the cases the Pituitrin was administrated in the second stage of labor. It failed only once; in all other instances its action was very pronounced. And although we encounter a great many cases of narrow pelvis in Dresden, from 40 to 50 per cent., it was not necessary

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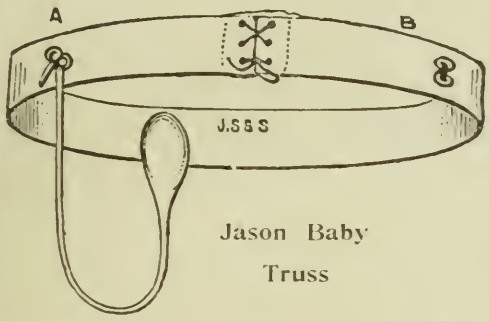

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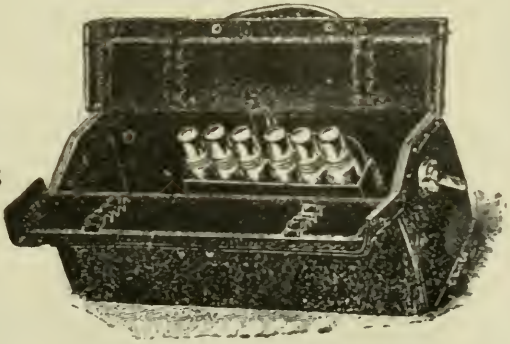

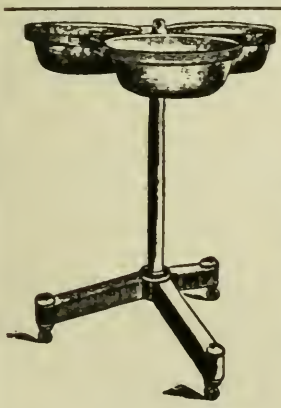

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to have recourse to forceps delivery in a single instance in which Pituitrin was employed. . . . According to our experience, Pituitrin is the ideal oxytocic." Pituitrin is manufactured by Parke, Davis & Co. It is supplied in one-ounce bottles and in glaseptic ampoules (for convenient hypodermic injection), each ampoule containing one cubic centimeter, or 16 minims, the usual dose. Parke, Davis & Co. have just issued a pamphlet on Pituitrin as an oxytocic, in which is reprinted not only the extract from Dr. Vogt which appears in this article, but also a number of others from prominent German specialists and practitioners, in which Pituitrin is highly extolled as a corrective of uterine inertia. Physicians will do well to write the company, addressing them at the home office in Detroit, for a copy of the pamphlet.

A MEDICAL MAN'S DRESS.

The days when the physician made an open parade of his calling by appearing in public places in full-blown academicals, or, upon more private occasions, attired in silk coat, wig, stockings and cane, are now over, and few thoughtful persons would desire to return to such conspicuous costume. The nearest approach to this affectation is the traditional academic dress, worn on special occasions only, but this is invested with all the mediæval dignity inseparably connected with the ancient seats of learning. Apart from the gown and hood, however, the ordinary everyday attire of the medical practitioner is still governed, almost subconsciously, by the dictates of conventionality. As a lecturer remarked at the recent Nursing Conference, held at Westminster, no class is so punctilious as medical men in being correctly clothed in "regulation dress," presumably, the orthodox silk hat and frock coat. "A doctor otherwise than conventionally attired for whatever occasion presents itself would soon be looked upon by his *confreres* as something of an eccentricity, if not worse." Nevertheless, we have come across many members of the craft in full swing of work who are bold enough to throw conventionality to the four winds, and who appear quite unconcerned upon the most professional occasions in a get-up that is, to say the least, distinctly original. The strange thing is that their practices do not appear to suffer at all from this departure from the normal. Suitability to any occasion is, of course, in much better taste than merely trying to look impressive.—*Medical Press and Circular.*

Nutrition Depends Upon Small Matters

It is beginning to be recognised that it is a mistake to force hysterical, emaciated or tuberculous patients to take large quantities of "nutritious food," and that course will probably soon become as antiquated as the copious drugging of the past.

BOVRIL

in small quantities, taken as part of the daily diet, has been proved to increase the power of digestion and assimilation, for the series of tests made by Professor Thompson, M.D., Sc.D., at the Dublin School of Physiology showed conclusively that while Bovril was taken with ordinary diet the weight of the subject of the test was increased as much as from ten to twenty times that of the weight of Bovril taken.

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Lime Water vs. Phillips' Milk of Magnesia.—Lime water, according to the 8th decennial revision of the U. S. Pharmacopeia, should contain not less than 0.14% of pure Calcium Hydroxide ca $(OH)_2$, about 10 grains to the pint. The percentage of Calcium Hydroxide varies with the temperature at which the saturated solution is prepared, being 0.17%, about 12 grains to the pint at 15°C. (59°F.), and diminishes as the temperature rises.

In over 100 samples of lime water obtained from reputable pharmacists the amount of Calcium Hydroxide varied from 1 to 11 grains to the pint, 75% examined was below standard strength and in several the percentage of lime was so low as to make the preparation practically worthless.

Phillips' Milk of Magnesia is a hydrate containing not less than 24 grains of pure Magnesium Hydroxide ($Mg H_2 O_2$), to the ounce. A teaspoonful is equivalent in acid neutralizing power to about 6 ounces of lime water of standard strength.

"50 c.c. of lime water require for complete neutralization not less than 19 c.c of tenth-normal Sulphuric Acid V. S. (corresponding to about 0.14% of Calcium Hydroxide), phenolphthalein T. S. being used as indicator" U. S. P.

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Dominion Medical Monthly

And Ontario Medical Journal

Vol. XXXIX. TORONTO, NOVEMBER, 1912. No. 5

Original Articles

*PRESIDENTIAL ADDRESS, CANADIAN MEDICAL ASSOCIATION

By H. G. MacKid, M.D., Calgary, Alta.

If, in rising to address this national association as its president for the year, I confess to some small feeling of pride, I have little doubt you will forgive me for it. It is a feeling born, and legitimately born, of a deep sense of the honor you have laid upon me; and I trust you will accept the assurance of my heartfelt thanks.

Yet, deeply as I have appreciated the honor, I have felt the responsibilities of the office in an equal, or even a greater, degree. At times during the past year, let it be confessed, the work and worries incident to preparing for this meeting have almost made me regret my election. We all owe a debt of gratitude to the medical men in Edmonton and the city authorities for the arduous work they have done and the excellent help they have rendered.

Gentlemen, I do not propose in this presidential address to take up any one aspect of medicine in particular, as is done in many addresses of this character; nor to give a general review of the progress of medicine during the past year, with which many of you are better acquainted than I am. What I have set before myself is rather to review briefly the work of the association in the past two or three years; to point out the lines along which progress has been made, and along which, as I take it, progress has still to be made; to estimate what part in it all the West has taken and may take, and, finally, to make an appeal for greater unity in thought

*Reprinted from *Canadian Medical Association Journal.*

and in aim among the profession in Canada for the advancement of this association. If what I have to say shall render even the slightest service to the cause of the association, and through it to the cause of medicine in Canada, I shall feel myself amply repaid.

The selection of Edmonton for the place of meeting of the association this year is significant. It marks the awakening of the East to the fact that this Western part of the middle West has come to man's estate, and is showing the lustiness of youth. We of Alberta who have grown up, so to speak, with the province, have been ourselves amazed at the strength and rapidity of her growth. But the East had not really recognized the fact. The Easterner knew much of Vancouver and Winnipeg, but little of Calgary and Edmonton. Your selection of Edmonton, therefore, came as a welcome surprise. When it was first suggested, we immediately set our hearts on it. We desired greatly to give you a taste of Western hospitality, and we desired also that you should see us and observe how well we were getting on. Perhaps there is in us some such spirit as that of the boy who insists on his father measuring his height against the door every month.

However all this may be, you are eventually here, and in the name of Edmonton, and of Alberta, I bid you heartily welcome.

This is only the second time that the association has held its annual meeting in Alberta. In 1889 it met at Banff, and there were only eighty-two present.

Only two meetings in the history of the association have been held in the West previous to the present one. Of these, one, as I have said, was held at Banff, twenty-three years ago, in the year 1889. The president was Dr. H. H. Wright, of Ottawa, and the general secretary was Dr. James Bell, of Montreal, both of whom have since died. The vice-president for the North-West Territories at that time was Dr R. G. Brett, of Banff, who is so widely and favorably known throughout the West. The second of these meetings was held in Vancouver in August, 1904. The president was Dr. Tunstall, of Vancouver, and the secretary Dr. George Elliott, of Toronto. Dr. Elliott's annual report gave certain statistics of attendance which are interesting. He said that during the first decade after the organization of the association in 1867, there was an average attendance of seventy-one. In the second decade, from 1877 to 1887, there was an average attendance of 74.8; during the third decade, 107.5; while for the previous seven years, that is from 1897 to 1904, the average attendance was 139.1. In the light of these figures it is interesting to note that the average attendance for the past seven years has been 320, while if we count only the last three meetings since the inauguration of the *Journal* it is 400.

In reading over the minutes of the Vancouver meeting, I came across two resolutions of interest to us. One concerned the question of a Public Health Department for the whole country, the other that of Dominion Registration.

At the Vancouver meeting in 1904, a strong resolution was passed, urging the Dominion Government to establish a department of public health under a minister of the crown; a matter which the association had been urging for three years. Unfortunately, this resolution, as well as others of a like purport, remained without effect. But I am happy to be able to say that matters in this direction now look more favorable. At the first meeting of the Canadian Public Health Association, held last December in Montreal, under the presidency of Professor Starkey, Premier Borden promised that his government would institute a general reform in public health matters, and put that department on a sound and modern footing. In this he was supported by the Hon. Martin Burrell, Minister of Agriculture. We can thus hope that, before long, this very important question will be settled in the manner that this association has been urging for so long.

At the same meeting there was passed a resolution concerning Dominion Registration, to which Dr. Roddick, of Montreal, had given so much of his time. This, too, has now come to pass, but only this year. During the present spring the so-called "Enabling Clause" was finally passed by Ontario, the last of the provinces which had previously been afraid that their provincial autonomy would be endangered; and I am glad to be able to say that we are finally in a position to begin the detail work of arranging for a Dominion Council.

The Roddick Bill aims at the establishing of one set of examinations and one standard of qualifications for the practice of medicine in Canada, in place of the different examinations and varying standards of the individual provinces. It was introduced in the House of Commons in 1902 by Dr. Roddick, then representing St. Antoine Division, Montreal. The bill was passed, but owing to objections raised to certain features by provinces jealous as to their existing rights, it was found impossible to give effect to the act.

About two years ago a meeting of the representatives of the provincial medical councils was held in Montreal, when Dr. Roddick succeeded in securing the consent of all to certain amendments which he proposed to the original Act. These amendments, removing earlier objections, were embodied in a bill which was passed at the 1911 session of the Parliament in Ottawa. It is part of the Act as

it now stands that the provinces give their assent to the principle of the Act through a bill passed in their own legislatures, and it is this step which has now been taken by all the provinces.

When the Dominion Medical Council is finally formed it will be possible for a physician, having passed the examinations prescribed by it, to practise in any province of Canada, instead of, as at present, only in the province or provinces where he has satisfied the requirements of the respective provincial medical councils. The Dominion Medical Council will have full authority over the purely professional subjects, while the provinces will probably exercise authority over the non-professional subjects of the examinations.

I have no doubt that I voice the sentiments of all of you here present, and indeed of the whole profession in Canada, when I say that we all owe a profound debt of gratitude to Dr. Roddick, who has been the direct means, and in a sense the only means, by which this beneficent law has been placed on the statute-books. We realize what a vast amount of time and energy he has expended on this work; how, indeed, he has given many of the best years of his life to it. And in thanking him we desire to record, not alone our appreciation of the work he has done, but also of the sacrifice it has cost him. If it is, in his eyes, any reward that the profession throughout the country feels grateful to him for his work; if it is to him any gratification that the whole of Canada has learned to call this bill the "Roddick Bill"; if it is any pleasure to him to realize that every member of the profession, thinking of this task which he has accomplished, looks up to him with respect largely mixed with affection, let him be assured that all this is true. It is an achievement which perhaps no other medical man in Canada could have brought to pass. The task of reconciling so many diverse and even warring interests in the various provinces of the Dominion; of overcoming prejudice, and of bringing together those of dissimilar views, was only to be accomplished by a man whose professional reputation was high from East to West, and whose tact had become almost proverbial from East to West. People not only gave him affection; they gave him respect. It was the combination of qualities of head and heart in him which finally brought this great matter to a successful conclusion. One of the chief privileges of my office this year lies in the opportunity which it affords me of thus giving public expression, on behalf of the association, to the gratitude which we all feel towards Dr. Roddick.

I have thought that this meeting would be interested in a short review of the recent work of the association. The associa-

tion, it is true, has been in the last ten years steadily increasing in numbers, but the increase up to a recent period has been slow. The establishment of the *Journal* two years ago gave an enormous impetus to its growth. With the inception of the *Journal*, the conditions of membership were radically changed. In former years a member paid $2.00 annual subscription, and paid it only when he attended the annual meetings. It is perfectly clear that with an annual attendance varying from one to three hundred the amount of money in the treasury was rarely sufficient to do more than pay the ordinary expenses of the secretary's office, together with the expenses incident to the annual meeting. The activities of the association along general lines were extremely hampered. Without an official organ and without money, there was very little that could be efficiently done. Now we have changed all that. Thanks to the labors of the Finance Committee of the past two years, we have established an efficient journal of the association, which, under the able editorship of Dr. Andrew Macphail, has already won a place for itself in the periodical literature of the medical world. We have hopes that within a short time we shall be able to make it a weekly instead of a monthly. That will, however, depend upon the support given the association by the profession at large throughout the country. In the second place, the establishment of the *Journal* enabled the association to raise the membership fee to a reasonable amount, and to make membership in the association and the payment of the annual dues a permanent matter. I am instructed by the secretary and by the treasurer to say that this does not mean that the association has grown suddenly rich. In spite of the increased income, the necessary expenses connected with the publication of the *Journal* have eaten up nearly all the revenue. But the profession now has an organ to represent it in Canada; and while it is yet too soon to expect that it can give adequate representation to all the branches of the profession, and though it must naturally fall short as yet of the standard which many of you hope for it, it has nevertheless done extraordinary good work, and is a journal of which we all feel proud.

During the last two years a second big piece of work has been carried on by your officers. I refer to the affiliation of the various Provincial Associations with the Canadian Medical Association. At present all of the provinces save one have declared themselves in favor of affiliation, and have become affiliated. I am convinced that this work will be of the greatest benefit to the profession in Canada.

I pass now to a brief consideration of the needs of the future. Along what lines are advances to be made? To begin with, there is one matter, gentlemen, which I think is of paramount importance to this association, and it is this: the consolidation of the profession in Canada into one strong and united body. That task can be accomplished by no other means than by this national association. We have already done something towards this end. No longer than three years ago we were a very haphazard body. The membership was constituted, for all practical purposes, only by those who came to the annual meeting—from three hundred to four hundred men. And these, of course, varied enormously from year to year, according to the part of the country in which the meeting happened to be held. With this state of affairs, there was no possibility of concerted action. A great step forward was made in the establishment of the *Journal* of the association, and in making membership continuous, and the payment of the fee an annual necessity for continued membership. The establishment of the *Journal* involved, as I happen to know, a very great amount of labor on the part of the Finance Committee, and the thanks of the association are due to the members of the Finance Committee for the last three years, as well as to its able and self-sacrificing editor, Dr. Andrew Macphail. The *Journal* has had a very excellent start. It had to be begun as a monthly, but we look forward to its becoming, before long, a weekly. Canada can afford plenty of good material for a weekly, if material were all that was needed. But, unfortunately, journals cannot live on material alone. The financial burden of the undertaking is very great; and the Finance Committee assures me that unless the membership roll of the association increases very considerably, it will be impossible to stand the expenses of a weekly. When we consider that the *Journal*, as the organ of the Canadian Medical Association, is the one great bond which alone can unite the profession from East to West, we cannot fail to realize the great importance of loyal adherence to the association. It means so much to the profession in Canada as a whole, and to each individual man, that there should exist a strong central body, like the Canadian Medical Association, to look after their interests, that I cannot conceive how any medical man should remain out of it.

This, then, is the great problem—to get the Canadian Medical Association solidly cemented together. How is it to be done? To my mind, it is to be done by an extension of the principle of affiliation. Two years ago the only province that had declared itself in favor of affiliation with the Canadian Medical Association, and

that became affiliated, was Ontario. In the last two years all but one of the provinces have followed Ontario's lead, and the one exception has declared itself unofficially in favor of affiliation at an early date. This is the necessary beginning. But what we have yet to do towards organization, is to create a properly constituted body, a sort of parliament, with proportionate representation from each province. Hitherto we have had the Executive Council, but this body has been chosen in an absolutely casual way at the times of the general meetings by members who happened to be present at the first meeting of the session. The members of the Executive Council should be properly elected by the respective provincial associations, and the council should have more work given to it and greater responsibility placed upon it than in the past.

But this affiliation of the provincial associations with the Dominion Association is only half of what should be done. The principle of affiliation should be extended to embrace the relations of the provincial with the county and city societies. At present this is practically barren ground. The county societies have no relations with the provincial associations. They are casual and independent. Yet there can be no doubt that, to cement the profession together, the bond between the county and provincial societies ought to be quite as close as that between the provincial and national associations.

This then, gentlemen, is what I feel sure we must strive for, and what I ask your co-operation in. Let us begin with the county societies as the centre of things. Let us group, if necessary, several counties into one good district society. Let these elect members as delegates or officers to the respective provincial associations. Where no county societies exist, let the men of that particular region organize one. This has already been proposed for Ontario by Dr. Herbert Bruce, in his recent address as President of the Ontario Medical Association for this year. He said: "I think it very desirable that there should be an increase in the number of small county medical societies, and I should like to suggest that, for this purpose, the province be divided into ten districts corresponding to the ten health districts recently established by the provisions of the new health bill. As there are forty-seven counties in the province, this would mean that each society would include four or five counties, which appears to me to be a practical arrangement. Then the method of securing membership in the Ontario Medical Association would be simplified by accepting the members of these smaller societies, which would obviously be in a better

position to determine their qualifications." It seems to me that Dr. Bruce's proposal is of the greatest importance, and I would urge that a similar plan be adopted by the other provinces. Indeed, I think, gentlemen, that if this address has any value at all, that value lies in the advocacy of the idea just described. This is not the place to go into details of organization, which may well be left to the Executive Council and the general secretary; but I am convinced that a close union of all the county societies with their provincial association is the great need of the immediate future of this association.

But it may be asked by some of you, what, after all, are the advantages to be gained by this scheme of consolidation or affiliation? Are we going to be any better off for it? Perhaps the best reply I can make to such a hypothetical question is to point to the extraordinary success of the American Medical Association. I presume it can safely be said that no national association in the world has accomplished so much in so short a space of time for the general good of the profession as has the American Association. Anyone who has followed its work at all closely cannot but admire the extraordinary amount of good, both for the profession and for the public, which it has accomplished in the last ten to twenty years. The scope of its activities has widened enormously. It would be impossible in an address of this nature to refer in detail to all these activities, but I cannot avoid calling your attention to a few of them. It is well known to you that in the matter of medical education, not many years ago, the States, with the exception of a few prominent universities, were in a deplorable condition as regards their medical schools. The proprietary school, and as a more or less natural result, the diploma mill, flourished. The American Medical Association set itself to clean their Augean stables. Their stables were encumbered with such stuff as the diploma mill, a low standard of professional conduct, commercialism, quack medicines, dishonest proprietary remedies, all sorts of fake cures, and all sorts of patent medicines. They have not rid themselves, by a long way, of these matters of reproach, nor indeed has any country anywhere, but they have waged a very good war against them, and in that they serve us as a very good example. What have they done? They have established permanent, and active, and hard-working committees on medical education, which have reduced the number of the low-class medical schools to nearly half what they were before. They have established a committee on legislation, which, in a great many ways, has been of the greatest assistance in fighting the passage of bills in favor of unqualified sects in medicine, and in

favor of the proprietary interests; they have established committees on such subjects of general interest as anesthesia and the newer remedies, which have given to the profession at large reliable information upon these things. They have organized a very large proportion of the profession in America into a united body; they have published the fullest and most accurate directory of the medical men in the United States and Canada that exists, from which, by the way, our own association has derived much benefit. They have gradually made of the *Journal* of the association the best all-round weekly in the world; certainly the best for the general practitioner. Now the secret of the whole thing, the key-note of its success, has lain in its power to secure the loyal support of the profession throughout the country, and this they have done by the plan of organization that I have outlined above—county societies uniting to form state associations, and state associations uniting to form the national association. It means something to a man to be a member of a county society, for that is the only gateway to membership in the state and national associations. There is no reason why we in Canada should not make a like success with our own Association and our own *Journal*. All we need is a good start, and if we can arouse the enthusiasm and obtain the loyal support of the majority of the profession in Canada, we shall be able to follow out a like successful career. If we can only secure a large enough membership to justify the expenses of making our monthly into a weekly, we can then go ahead at a great pace. The *Journal* will attract new members; it will pay, and more than pay, its own running expenses; it can serve as a medium of publication for the whole profession; it can influence the legislatures to enact good medical laws; it can wage effectual war on the nostrum vendors and the quacks of all descriptions; it can furnish up-to-date information on all subjects of interest to the general practitioner; and it can do a thousand other things which I have not space to mention here. Any tendency to the narrow view, to an exclusive attention to home affairs, to provincial chauvinism, to country or city narrowness, to personal absorption in one's own practice to the exclusion of a larger view of national medical affairs, must be combatted; and I think that I strike no false note in appealing to you all who are here present to act in your own district as missionaries in this problem, to arouse a pride in our association and a willingness to work for it. I think that I can guarantee that so far as the West is concerned that spirit is already strong in us.

Gentlemen, I know you will forgive me, knowing me as you do of old for an enthusiastic Westerner, if I now allow myself, in

closing, a few words upon what seems to me to be the value of the West to the profession of medicine in Canada and to this association, and a few words also upon the future of medicine in the West.

What is the value of the West to medicine? Does not the answer lie in the words, energy and newness and opportunity. The West is young and lusty, and full of life. It has a love of action, and it has a love of newness. It is unhampered by traditions, whether of conduct or of science. It will do the things that it thinks right, whether in conduct or in science. I really do believe that, in medicine as in the rest of human endeavor, the West is going to supply that leaven of originality which, after all, is "the one thing needful." The West thinks boldly and acts boldly, by necessity first, then by conviction, and ultimately by habit. Give the West a little more time to establish herself soundly in the higher education, by means of provincial universities, and she will yield a rich harvest of energetic and trained men who will have in them that invaluable dash of Western originality which makes for really big work.

And now, what is to be the future of medicine in Alberta and the West? I think it will be admitted by everybody that the goal towards which we must strive in the matter of medical education in Canada is the establishment of a first-class medical school in each province of the Dominion, as part of a provincial university. This does not mean that each province must have a medical school as a necessity of itself: it means rather that with the enormous growth in population in Canada, it will become inevitable that each province shall have a medical school, and that we must see to it that that medical school is a first-class one. In Alberta we already have, and have had for the past four years, a provincial university which is doing excellent work under the able presidency of Professor Tory. We have no doubt that before very long we shall be able to establish a good medical faculty. And I would point out that we have already in Alberta first-class facilities for the education of the medical man. Our hospitals are excellent institutions, and will soon be quite large enough to serve efficiently for the teaching of medicine. What we must aim at is to establish close relations between the university and any proposed beginnings of medical teaching. There is plenty of money in the country with which to endow education. It must be our business to show to our wealthy business men the advantages which must accrue to the province at large from any financial help given to the cause of general education. I place my faith in the growing wealth of this new country, and not less in the inherent generosity of the Westerner. It seems to me in-

evitable that our country will before long, not only have a university and a medical school that one may be proud of, but that these will be amply endowed with money made in the West, and given by the generous men of the West. All this may probably happen in Vancouver before it happens in Alberta, but we shall certainly not be far behind.

Looking forward, as I do, in this hopeful way to the future of medicine in the West, and anticipating as I do the training of medical men in the West, I feel sure that when we do graduate men in medicine out here, these men will do us credit. Like all Westerners, our graduates will have the love of travel, perhaps more so than have they of the East, and perhaps on the average they will have more money to do their travelling with. Already our medical men are well known in the big clinics in this country and abroad, from the mere fact that they visit them so often. This will make for broadness of view. If you get in any man broadness of view combined with energy and the progressive spirit, you get exactly those qualities which make for the advancement of medicine as a whole and the welfare of the patient in particular.

We have, out here, the advantages of a clean slate. We can begin right. We can begin where others leave off, unhampered by conditions that have got set and that are difficult to change. I hail the meeting of this national association in Alberta as a great stimulus. Our own men will be more encouraged to better work and our laymen will have an opportunity of seeing what the profession is doing for Canada.

And now, fellow-members of the Canadian Medical Association, I desire in closing to thank you for your patience. Yet I would not quite finish with nothing but the customary "thanks" in my mouth. Rather would I end with a renewed appeal to all the members here present, and to the whole profession in Canada, to unite themselves heartily together in this national association, for the benefit of the individual and the benefit of the whole.

A MODEL MEDICAL STAFF FOR A MODERN GENERAL HOSPITAL

Goldwin W. Howland, M.D., Toronto.

The general hospitals of most great cities still are staffed on the same ancient and old-fashioned methods that were suitable when the actual amount of specialized knowledge was very little and undeveloped. As a result to-day, with the exception of one or two famous hospitals, very little satisfactory work is being done, and the patients themselves receive only the ordinary treatment, which they might as well obtain from a well-versed general practitioner.

The question as to whether these general hospitals in the large cities are allied to a teaching university has little to do with this condition, for one and all should be endeavoring to increase the medical knowledge of the age and to give their patients the best and most modern treatment.

With the enormous amount of new material constantly being added to the annals of medicine, it is utterly impossible for any ordinary man to successfully accomplish the feat of understanding each division, and one sees in our midst much specialization in many lines, while, curious to say, it is wholly neglected in the staff formation of most, if not all, of the general hospitals.

Truly along the eye, and the ear, the throat and nose, gynecology and obstetrics and several surgical divisions, the specialist is found and separated by the hospital surgeons, but along the line of medicine, despite the fact that the chest, the abdomic, the cardiac and the nerve specialist are more or less definitely designated among the city practitioners, yet in the staffs of our large general hospitals only the skilled general practitioner has any place, and he is wholly unsuited to advance the science of medicine or to keep up-to-date on all the sides and subjects included in that science.

The reason for this lies in the fact, preached over and over again, that to be a successful and skilled practitioner, capable of being a chief in a hospital, it is absolutely necessary that a physician should be skilled in all branches of general medicine and not made narrow in his views or developed into a poor diagnostician by commencing at once or soon after graduation the study of a medical specialty.

This important fact is true and well known, and it is necessary therefore to include it as the basis of construction in a general hospital staff, while at the same time there must be some method of arriving at the specialist position as the culminating object both

of a professional life and as a means of developing medical science and of giving the patient the most modern treatment.

The following plan is the one which appears most natural in order to accomplish all that both friends and enemies of hospital specialism demand:

1. There must in the first place be a senior physician over the whole medical staff, both indoor and outdoor, who has charge of all arrangements and has the duties which fall on every head of a big business.

2. Associated with him there should be two or three eminent physicians, who have graduated from the ranks below, having moved up in the hospital from post to post.

These senior physicians must act as active consultants, having charge of all the cases entering the hospital. But they must, in common with the senior chief physician, have declared the specialty in medicine which they intend to follow, namely, such divisions as infections, chest, abdominal or nervous diseases; and during their period of time as active members of the hospital staff they shall have charge of all the patients which fall into the specialties they have chosen. In the smaller hospital it might be advisable for these senior physicians to interchange their special subjects each year, but in the large hospitals this would be a serious mistake, for the idea there is to develop the final period of a man's existence as a hospital physician so that he may be of the greatest value to the patients, and a yearly interchange would greatly invalidate this plan.

So that the conclusion on this first point is that the senior men on a hospital staff should denote the specialty they wish to adopt and that they should have all the cases under their care which would fall into that department.

Here I may add a note, namely, that such a selection would not mean that in his general consultation work a man would have to be governed by his hospital specialty; truly the work would turn that way, and most advantageously to his patients, but yet this would not by any means force that conclusion.

In the second place, it might be urged that, in the ordinary run of promotion, it might frequently occur that the tastes of the next in order for promotion might not be towards the vacant specialty; but to a man trained in the general plans such a condition means little, and it could always be arranged that he could move to the special department he favors when such a vacancy occurred there, or otherwise remain on the general staff, to be described below.

In the second place, besides this post of specialist, on the indoor department the same men should have charge of parallel special-

ties in connection with the outdoor staff, standing as active consultant there also in the same specialty they adopt on the indoor. Such special departments in the outdoor being held probably twice a week, and having the result of raising the standard of the outdoor department to a very high efficiency.

3. The next post on a hospital medical staff below the chief consultants should be that of ward chiefs.

The assistant physicians, or ward chiefs, should each have charge of certain definite wards in the hospitals. They should be responsible for all the cases entering, for their examination, diagnosis and treatment. The ward chiefs then may be said to represent the general physician and would obtain the experience which it is necessary for every first-class specialist to obtain. When a vacancy occurs in the staff of consultants, they must then determine the specialty they will follow on the hospital staff, and either accept the vacancy offered or refuse, or in accepting they may arrange to transfer to another specialty when that becomes vacant.

The relation of the patients to the consultant and the ward chief is as follows:

The ward chief is in charge of certain wards only, and on diagnosing a case he transfers it to the consultant who has charge of such a specialty, and who is not attached to any special ward. The latter may treat the case or leave the treatment to the ward chief. My experience with hospital registration permits me to add that this transfer can be arranged without the least difficulty by an absolutely simple method, which I need not trouble you with in detail.

By this excellent plan you give your senior and assistant physicians both first-class opportunities for work, you reconcile the difficulties of developing specialists without general training, and you place the senior physician where he should be and is in general practice, namely, as an active consultant.

As to the juniors on the staff, they can, as always, be easily disposed of. Place them in charge of the general outdoor department, seeing all new cases and sending each on their return visit to the special department, when they may either be treated or, if of little interest, returned to the junior for steady treatment.

Finally, the junior should serve for half the year as assistant to a ward chief and half the year as assistant to one of the special medical departments, in addition to the regular work on the general outdoor.

Such an arrangement of the staff will serve to develop all that is good in a man and will make the general hospitals adopting it much more up-to-date and useful than the present hopelessly unfavorable arrangement.

Medicine

Graham Chambers, R. J. Dwyer, Goldwin Howland,
Geo. W. Ross, Wm. D. Young.

Pathology and Diagnosis of Constipation. (Am. Proctologic Society.) By Wm. M. Beach, M.D., of Pittsburg, Pa.

Pathology of constipation is naturally considered under two general heads, namely:

1. Stasis due to altered secretions.
2. Stasis due to mechanical obstruction.

The first may be the result of neuroses and acute fermentative indigestion, or a bacillary infection. The anerobes may attack the contents of the bowel or the gut wall itself, leading to varying degrees of inflammation in the colon—as ulceration, hypertrophic and atrophic catarrh. The colon impaired functionally or traumatically leads to stasis and consecutive inhibition of the fecal excursion. Such impairment further disturbs the physiologic lines of defence against the auto-intoxications as:

(a) The intestinal mucosa itself;
(b) The liver, and
(c) The antitoxic glands.

Collateral with these phenomena in constipation are such factors as cholelithiasis, hypochlorhydria, cholangitis and appendicitis, as altered secretions incident to coprostasis.

Mechanical obstructions to be reckoned with include:

1. Enteroptosis or Glenard's disease.
2. Gastroptosis.
3. Dilatation of the colon.
4. Certain extra-mural and intra-mural sources of obstruction—as pelvic tumors and displacements, nephroptosis, enlarged glands, intussusception, malignant disease, etc.
5. Acute angulation at the recto-sigmoid junction, hypertrophy of O'Beirne's sphincter, and stiff rectal valves.
6. Disease in the anal canal.

Diagnosis resolves itself into an analysis of the above conditions; to differentiate acute or chronic obstruction and the ordinary functional stasis which may also be accompanied by the various forms of colitis.

Sequelae of Constipation, including Auto-Intoxication. Am. Proctologic Society.) By ALFRED J. ZOBEL, M.D., of San Francisco, Cal.

In this paper the writer mentions many of those conditions which seem to have their origin in chronic constipation with auto-intoxication. He states that experimental evidence has not as yet demonstrated that they actually do so, but close observation and clinical experience tend strongly to confirm the theory.

He writes that while all constipated individuals do not necessarily suffer from those symptoms ascribed to auto-intoxication, yet in his experience most patients with auto-toxic symptoms are constipated. This may be without their knowledge, and they often deny in good faith that they are so; but proctoscopic examination generally proves the sigmoid and rectum to be loaded with fecal matter.

A report is given of the proctoscopic observations made on a number of cases of hypertrophic arthritis. In almost every instance the lower bowel was found filled with a fecal mass, although most of the patients positively stated that they had had an evacuation within an hour or two previous to the time of examination. Thorough colonic flushings invariably brought about relief from pain, and in time marked improvement in their general condition.

These observations are in line with the theory advanced by various authors that arthritis deformans may be due to intestinal auto-intoxication.

Mention is made of the various muscular, arthritic, and neuralgic pains caused by absorption of toxins from the bowels. These are often misunderstood, and treatment instituted for rheumatism.

Congestion, irritation and various disturbances, both functional and organic, of the uterus, tubes and ovaries in the female; the vesicles, urethra and prostate in the male; and the bladder in both, may result from chronic constipation. This is due both to the proximity of these organs to the lower bowel and to their close physiological relationship.

It is noted that albuminuria may arise from intestinal stasis, and mention is made of the opinion advanced by various clinicians that a nephritis may even be caused thereby.

The role of constipation with auto-intoxication as causal factors of epilepsy, neurasthenia, and various mental conditions, as claimed by certain well known and competent observers, is stated here without comment.

The influence of these conditions on the heart, blood vessels and the blood and its effects on the eye, ear, nose and throat are dilated on in this paper, and in support of these statements quotations are culled from the literature that has appeared on this subject during the past five years.

The writer further briefly mentions a few more of those conditions that are supposed to arise from chronic constipation with auto-intoxication, and concludes by agreeing with the trite observation of Boardman Reed that, "When we except the exanthems, malaria, syphilis, tuberculosis, and the diseases caused by traumatisms, by metallic poisons, and by a few other toxic agents or infections from without, practically all the remaining maladies which afflict us and cut short our lives are now directly or indirectly traceable to auto-intoxication."

Diphtheria.

G. I. Cumberlege (*B. M. J.*) is in favor of the oral administration of diphtheria antitoxine. The usual dose is 2,000 units followed by another dose. He has never given more than 4,000 units at a time. He has never seen a sign of serum sickness under the oral method of administration.

Carbolic Acid Poisoning.

A cupful of alcohol and water, four ounces each, given by the mouth and at once removed by stomach tube, is, according to Burke (*N. Y. M. J.*), the best antidote in carbolic acid poisoning. Apomorphine hypodermically if the tube cannot be used. If alcohol is not at hand, a cupful of clear whiskey, brandy, gin, rum or cider vinegar. These should be repeated every five to ten minutes from four to eight times. Then administer sodium or magnesium sulphate, one-half to a two ounce dose in cupful of water. Stimulate heart, respiration and circulation by atropine sulphate, 1-100 to 1-60 grain. Demulcents as eggs and milk as after treatment.

THERAPEUTIC TIPS

Nevus.

Bunch (*B. M. J.*) claims to have treated over 2,000 nevi with solid carbon dioxide. He believes this to be the best treatment yet devised. It is less successful in port wine stains with nodular, irregular surface and warty projections than in stellate, capillary, cavernous and flat pigmented nevi.

Chronic Urethritis.

Asch (*Zeit. für Urologie*) uses paraffine as an injection with ichthyol or tuberol mixed in it. It must be fluid at 40° C., anesthetise with alypin, 5 to 10% of paraffine, liquified by heating, injected and the meatus held for five minutes. The paraffine will remain in the urethra twelve hours.

Toxemia of Pregnancy.

Wm. M. Brown, Rochester, N.Y., for the toxemia of pregnancy, orders magnesium sulphate, hot packs, venesection, and intravenous infusion of saline or cane sugar solution. He considers veratrum viride may be dangerous as it adds another poison to the toxins present in the body. Delivery is to be considered the last resort. Begin early with vigorous elimination by the use of active cathartics.

Nocturnal Enuresis in Children.

J. A. M. A., gives the following prescription, if the urine is too acid: Potassii citratis, drachms, 1ss.; aquae menthol piperitae fl. ounces, 4. A teaspoonful in water, three times a day, after meals. This is for a child 5 years old, but a diet of milk and cereal would about correct the condition.

If the urine is alkaline, leave meat in the diet, and give hexamethylenine, grains xl. Fac. chartulas. A powder, dissolved in one-fourth of a glass of water, four times a day.

Asthma.

Kayser (*Thera. Monat*) describes thirteen cases of asthma and allied conditions where calcium chloride proved effectual as a prophylactic. He gave it as follows: Calcium chloride, 20 grm.; simple syrup, 40 grm.; distilled water to 400 grm. The patient took a tablespoonful of this in milk every two hours for eight days. After a day or two the patients all breathed and expectorated easier and their sleep was no longer disturbed. There were no further attacks after the third day, in all but two patients.

Erysipelas.

Chlumsky (*Zentra für innere Med.*) has never had such good results since employing externally a mixture of 2 parts of ground camphor and 1 part phenol, adding 5 per cent. alcohol to the mixture. This makes an oily fluid, free from caustic action, and it is only in delicate skins that there is a slight smarting. It seems to be a special poison to streptococci. He has employed it in hundreds of cases of erysipelas in the past few years. It may cause a blue discolorization of the skin for a time.

Varicose Ulcers.—(*Med. Press and Circular*).—The following method for treating varicose ulcers is much recommended by a surgeon as superior to all others. The leg is placed on an inclined plane (45°), the body keeping the horizontal position. After the limb is covered with a fine gauze or linen, ironed on both sides to make it aseptic, a strong compression of the leg is made by an elastic band, beginning at the toes and reaching the knee. In this way ischemia is obtained similar to that by Esmarch's band. As soon as the band has been rolled up the leg, it is removed, and the ulcer treated by the usual topics and a dressing applied; the patient wearing an elastic stocking can get up and walk. The elastic band, by compressing the dilated capillaries as well as the small veins and lymphatics, removes from the tissues the products of congestion, allowing thus fresh blood to circulate in the arteries. A better nutrition of the ulcer is the result, and the healing more rapid. Varicose eczema can also be treated with advantage by the same method.

Reviews

The series of lectures which Prof. Carl von Noorden, of Vienna, is to deliver in several American cities on "New Aspects of Diabetes, Pathology and Treatment," will be issued in book form, October 26th, immediately at the close of the New York lectures, by E. B. Treat & Co., New York, who have published all his other monographs.

Messrs. Rebman Company, of New York, beg to announce now ready:

1. *Surgery of the Brain*, Vol. II., by Fedor Krause, M.D., of Berlin.

2. *Ophthalmology*, Vol. II., by Roemer, M.D.

On the press:

3. *Surgery of the Brain and Spinal Cord*, Vol. III., by Fedor Krause, M.D.

4. *The Diseases of the Oral Cavities*, one volume, by Zinsser, M.D. Fifty-one colored illustrations (four-color process) and 22 (one of which is colored) illustrations of the teeth, spirochetae and trepenomata.

A Text-book of Ophthalmology, in the Form of Clinical Lectures. By Dr. Paul Roemer, Professor of Ophthalmology at Greifswald. New York: Rebman Company, 1123 Broadway.

The work practically covers the whole subject of ophthalmology in a useful and interesting manner. It begins by describing the methods of examination of the various structures of the eye in a normal and an abnormal condition, and the anatomy and physiology of the same. Every part of the eye is treated in a general way more or less fully, but what makes the book of special value to students is the clinical examination of each individual case as it appears in general practice.

The pathology and bacteriology is in no way neglected, and the Wassermann reaction and tuberculin test are fully discussed in their relation to ophthalmology. Treatment, both medical and surgical, is thoroughly up-to-date.

The book is generously and well illustrated, a feature which is of great assistance to one who sees but a limited number of cases.

This work should and will be a great help to students and practitioners of ophthalmology, and will, no doubt, prove of inestimable value to general practitioners, whose knowledge of ophthalmology is necessarily limited.

Surgical Operations. A Handbook for Students and Practitioners. By Prof. Friedrich Pels-Leusden, Chief Surgeon to the University Surgical Clinic and Chief of the University Surgical Polyclinic in the Royal Charity Hospital of Berlin. Only authorized English translation, by Faxton E. Gardner, M.D., New York, with 668 illustrations. Published by Rebman Company, 1123 Broadway, New York.

The object of this book is a desire to link together what the author has taught the students in practical courses and theoretical lectures. It is a well-written, comprehensive volume, which should appeal to students and medical practitioners who require a volume on surgical operations. The chief charm of the work is the post-operative advice. The first part is devoted to a clear and comprehensive article on antisepsis and asepsis and how to obtain asepsis, and a description of chirosote, which is sprayed on the hands or skin after disinfection and holds any germs which remain fast to the skin. The second part deals with anesthesia, and includes the use of ethyl chloride and infiltration of the skin with cocaine, suprarenal extracts and Schleich's solution, infiltration of large nerve trunks, and anesthesia after Oberst. Hackenbruch's technique; venous anesthesia after Bier's method, lumbar anesthesia and general narcosis. Minute directions are given for the use of these various forms of anesthesia.

Part 3 deals with reunion of tissues and the division of tissues, sutures, skin grafting and bone surgery. This is followed by sections concerning surgery of blood vessels, operations on the extremities, head, neck, chest, abdomen, and genito-urinary organs. The directions throughout are minute and the parts on post-operation complications are very instructive.

International Clinics. Vol. 2. 1912. Philadelphia, London and Montreal: J. B. Lippincott Co.

This quarterly number contains several articles of great interest, others that are not particularly original, and a few that might have been omitted.

A symposium on anesthesia includes a prominent series of subjects, including all known forms of relieving operative pain. There is not much that has not been written before, but the short papers are much to the point and clear the situation for the doubtful physician. The article on intraspinal anesthesia, by Steel, is the most interesting of the set. Under *Surgery*, Royster gives a most delightful paper on surgery of the kidney, and his views on prolapsed kidney and stone are well worth reading. The second surgical paper on "Direct Methods of Laryngeal Examination" is interesting for those who adopt this modern art. The best paper in the volume is that on puerperal infection, by Darnall, and his methods of treatment and his conservative views are well described and of the utmost importance. Ballantyne, of Edinburgh, describes in an excellent manner the National Insurance Act of Great Britain and rather encourages the view that the doctors have practically got all they asked.

The papers on nervous disease include (1) by Weedler, on "Ocular Manifestations of Hysteria," of which he gives six classes, *viz.*, eyelids, iris, ciliary, and asthenopia, amblyopia and amaurosis; the work is decidedly of interest. (2) A series of cases described by Mettler, which hardly are of value apart from the clinical cases. (3) "Flexner on Poliomyelitis," which contains little, if any, fresh matter. (4) "Headaches and Tender Points in Diagnosis," by Dickinson, a really good paper, but verily dogmatic. (5) "Spondylotherapy," by Abrams, which is apparently only a reminder of the subject. (6) "The Management of Sunstroke," by Baruch, who lays down the law, in the course of a most interesting discussion, that the frequently-used iced baths recommended by all authorities are the cause of many fatal cases. (7) "Psychic Hypertension," by Madison Taylor, seems to inculcate methods of physical nature to cure nervous derangements, especially motor training in relaxation.

The "Vaccine" paper is presented by Watters, and it is most interesting and enthusiastic. On pellagra, Mizell sketches the role of cotton-seed oil and goes most carefully into the treatment. Finally, Rudolf, of Toronto, gives a masterly paper on the dangers of underfeeding infants, in a common-sense, well-authenticated description, while Vivarska devotes himself to the subject of preventing the bottle-fed baby, which means, in his eyes, in improving the milk supply of the mother so that there can be no excuse to stop nursing.

G. W. H.

Dominion Medical Monthly

And Ontario Medical Journal

EDITED BY

Medicine: Graham Chambers, R. J. Dwyer, Goldwin Howland, Geo. W. Ross, Wm. D. Young.
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COMMENT FROM MONTH TO MONTH

The retirement of Dr. Adam H. Wright from the Professorship of Obstetrics in the Medical Faculty of the University of Toronto is a noteworthy event in the medical life of that institution.

A graduate in arts and medicine of forty years' standing, a teacher in the old Toronto School of Medicine, and since 1887 on the staff of the University, Dr. Wright's career has been for long years prominently identified with the progress and development of the provincial University, both in its general government and medical aspect.

At the same time he has always taken a leading place in the medical life of Toronto, the Province and Dominion. He has been particularly honored by his confreres, occupying the highest positions in the gift of the old Toronto Clinical Society, the Ontario Medical Association, the Canadian Medical Association, and the Aesculapian Club. He has occupied the position of Chairman of the Ontario Board of Health since 1911.

There is no more popular physician in Canada than Dr. Adam Wright; and he has always particularly endeared himself to the younger generation of practitioners, being the most approachable and lovable of men.

To the student body he was ever kind and encouraging, and was deservedly popular with all his classes; and he enjoyed in the best and highest sense the confidence and esteem of them all.

Canadian medical literature has been enriched by his contributions to city, county, provincial and national societies, particularly in his chosen specialty, in which he has for long been considered a high authority; whilst his Text-Book on Obstetrics remains one of the best and most practical works on the subject.

His many friends will wish him long life, good health, and continued prosperity.

The new Professor of Obstetrics and Gynecology at the University of Toronto is to be Dr. Benjamin P. Watson, of Edinburgh. Although a very young man to be called to such a prominent position, Dr. Watson has won distinction in the Mother Country. A Fellow of the Royal College of Surgeons of Edinburgh, a gold medallist, expertly trained in important hospital appointments, a student and assistant of such eminent men as Sir Alexander Simpson and Dr. Freeland Barbour, Dr. Watson may be counted upon to continue the status of these departments in the University, and, if possible, bring them to a higher degree of excellence.

The fourteenth annual report of the National Sanitarium Association is comforting reading. Prior to the inception of this pioneer work in the treatment of tuberculosis, there was a steady increase in the number of deaths in Ontario from this cause. The good work this Association has accomplished through the medium of its four institutions, as well as the educative influence exhibited, have very materially evidenced themselves in the annual reduction of deaths from this cause. The annual deaths twelve years ago reached 3,405; to-day they stand at a little over 2,000.

Of the 308 patients admitted to the free Gravenhurst institution, the greatest incidence of the disease is seen between the ages of fifteen and fifty, namely 295 cases, so that practically fifteen to forty may be set down as the age period for tuberculosis, sixteen being the number from forty to fifty. Of the total of 159 admitted to the pay institution, 148 were between fifteen and fifty years of age.

The occupations of admissions to the free hospital show these very interesting particulars: Eight book keepers; seventeen clerks;

fifteen domestics; thirty-six housewives; seven machinists; eight operators; twelve students; sixteen tailors; no occupation, twenty-six; laborers, twenty-six; farmers, thirteen. Further examination presents the strong feature that indoor occupation tends to favor infection far in predominance over outdoor life and work.

The statistics regarding inheritance and infection show that inheritance is equally divided on paternal and maternal sides, whilst that from both is a little more than one-half of either. Infection was seen in 26.2%, one-half of these also exhibiting a history of inheritance. Over one-half gave history of neither infection nor inheritance. In connection with this study it would be valuable and interesting to have these details classified from the male and female standpoint, which would evidence more indoor and outdoor life, as females are more given to indoor life than males.

At the Toronto Free Hospital and the King Edward Sanitarium at Weston there were 167 and 64 admissions respectively.

As regards age, in the seven years of the history of the former, out of a total of 1,170, 1,000 were between the ages of 16 and 50; in the latter, in four years, out of 316, 282 were between these ages.

Regarding occupations, the large number of laborers and houseworkers is particularly striking. For the present year (1910-1911) there were 32 houseworkers in the Toronto Free Hospital and 18 in the King Edward. The laborers numbered 38 and 10 respectively. As regards indoor and outdoor life, it is rather remarkable that laborers are so largely represented in the statistics; and the appearance of the disease in these must mainly be put down to inclemency of weather, exposure, etc.

Tuberculosis now being a notifiable disease, the difficulty of gathering statistics regarding conditions of discharged cases should now not be so very great. Information as to these "follow-up" cases would prove valuable, and an effort should be made to get this together in some concrete form.

The medical students' days have come once more. The introductory lectures have been given and the embryo disciples of Aesculapius have settled down to their everlasting grinds. One, two, three, four, five years and they will have administered to them the Hippocratic oath and be entitled to pin the caduceus upon their bosoms. Then with a sheepskin in their pockets they will march forth to conquer the world and disease.

The former they will find a difficult task; of the latter, instead of the schoolmaster being abroad in the land, they will find the

medical officer of health in his place, for sanitation, preventive medicine, public medicine is the popular movement of the day and generation. Far-off fields will look green, but there are hospital restrictions; and whole armies of quacks fattening in their pastures.

All these narrow the limitations of legitimate practice, but they can keep their heads up, for is there not always room at the top, though most are content to gain a perch upon the middle rounds of the ladder of fame.

Medicine they will find a noble calling. Some will follow it through life as their vocation. Others will pin on to it an avocation, and still others will not be content to sit still and wait, but will seek new paths for their energies.

Five years of time, study, work, expense, fees, board, books, will be the sum total upon which to begin his medical career—and in an ever-narrowing field of labor, he will be a wise young man who will weigh well whether the future medical field will look as green at the close of student life as at the beginning.

To-day the practice of medicine offers far less inducements than a couple of decades ago. There is no room for the hundreds who annually seek admittance at its portals. Unsettled conditions in Britain, rapidly decreasing incomes in the United States and Canada, attest thereto. The harvest is light and the laborers are many.

Editorial Notes

SMALLPOX IN CANADA

In Vancouver, July 14-20, one case: Halifax, July 7-13, one case; Ottawa, June 9-15, one case; Windsor, Ont., June 12-22, two cases; Montreal, June 16-Aug. 17, 18 cases; Quebec, July 28-Aug. 24, three cases; no deaths.

MEDICAL DEPARTMENT OPENS AT UNIVERSITY OF TORONTO

Sir Hector Cameron delivered the opening lecture at the commencement of the session of 1912-13, on the afternoon of the 3rd of October. His address referred to Lord Lister and his epoch-making discovery. He also addressed some sound advice to the medical students. Dr. Louden, the former President of the University, recalled the time when fifteen years ago he had conferred on Lord Lister the degree of Doctor of Laws. President Falconer presided.

SKIN CLINIC IN NEW YORK

The Governors of the New York Skin and Cancer Hospital announce that Dr. L. Duncan Bulkley will give a fourteenth series of clinical lectures on diseases of the skin, in the out-patient hall of the hospital on Wednesday afternoons from October 30th to December 18th, 1912, at 4.15 p.m. The course will be free to the medical profession on the presentation of their professional cards.

POLIOMYELITIS AND THE BITING FLY

Professor M. J. Rosenau, of Harvard University, announced at the Congress on Hygiene and Demography, in Washington, Sept. 26, that he had apparently succeeded in transmitting infantile paralysis from sick to well monkeys by the bite of the common biting fly, *stomoxys calcitrans*. This fly resembles in size and appearance the common house fly and is most frequently found in and around stables.

BRITISH COLUMBIA AND MEDICAL EDUCATION

According to Hon. Dr. Young, Minister of Education for British Columbia, there will not be for many long years a medical faculty in connection with the new British Columbia University. The opinion of the medical profession in the Pacific Province is that there is an over-production of medical practitioners in Canada already, and in this they are quite right.

ALCOHOL AND INSANITY

There are 24,655 insane people in the hospitals for the insane in Ireland, an increase of 250 in 1911 over 1910. The report of the Inspectors of Lunatics states that there is practically no relationship between the distribution of insanity in Ireland and drunkenness, as chronic alcoholism is so small in Ireland as to have no great influence on the insanity rate.

MEASLES DEADLIEST OF CONTAGIOUS DISEASES

In the last year reported by the Census Bureau of the United States measles claimed 6,598 children's lives. Two important discoveries have recently been made at the Hygienic Laboratory at Washington by Drs. John F. Anderson and Joseph Goldberger. The epidermal scales shed during convalescence contain no infective material and do not serve to carry the disease, but contagion is really carried by the secretions from the nose and throat. Lower animals may suffer from measles, monkeys having been infected.

GERMAN DOCTORS VISIT TORONTO

Returning from the International Congress of Hygiene and Demography, about 250 prominent German physicians and scientists visited Toronto on the 3rd of October. A civic deputation conducted them to Convocation Hall of the University of Toronto, where they were welcomed by President Falconer and Dr. R. A. Reeve, President of the Academy of Medicine. The city of Toronto entertained them at luncheon. Amongst others who spoke were His Worship Mayor Geary, Mr. Gerhard Heintzman, Dr. Adam H.

Wright, Dr. Chas. J. Hastings, M.O.H., Prof. Dr. Rudolf Lannhoff, Professor His, Professor Loefiler, Dr. Meissner, Dr. Fornet and Professor Gaetner.

ACADEMY OF MEDICINE, TORONTO

The first general meeting of the Academy of Medicine was held on Tuesday evening, October 1st, when Sir Hector Cameron, of Glasgow University, delivered an address on "The Treatment of Abscess" and "Some Historical References to Antisepsis and Asepsis."

Dr. J. W. S. McCullough, Secretary of the Ontario Board of Health, made a presentation of a volume of manuscript clinical records of cases of women patients treated in the Edinburgh Royal Infirmary, 1787-88. Service of Dr. Gregory. Chief Clerk, Simon Fraser.

Dr. R. A. Reeve also made a presentation of B. Siefried Albini. *Explicatio Tabularum Anatomicarum.* Bartholomaei Eustachii, *Anatomici* Summi MDCCXLIV.

INTERNATIONAL CONGRESS OF MEDICINE (LONDON, 1913)

Preparations for the 17th International Congress of Medicine, which is to be held next year in London, England, are going forward rapidly. A circular has recently been issued by the Honorary Secretary, that all those intending to present papers at the Congress should notify him by February 28th, 1913, giving at the same time a short abstract of their paper. In this way a synopsis of the papers to be read will be prepared by official "reporters," and these will be translated into the various languages and published in the Medical Journals before the Congress meets. Those taking part in the Congress will thus come well prepared to participate in the discussions. We would urge upon Canadians the necessity of doing their fair share to make the Congress a success.

It is with pleasure we announce that Dr. T. G. Roddick, of Montreal, Emeritus Professor of Surgery, McGill University, has been appointed a Vice-President of the Congress.

The Canadian National Committee, as at present constituted, is as follows: W. H. B. Aikins, Toronto; A. McPhedran, Toronto; G. E. Armstrong, Montreal; T. G. Roddick, Montreal; H. A. McCallum,

London; H. G. MacKid, Calgary; Jasper Halpenny, Winnipeg; C. K. Clarke, Dean of the Medical Faculty, University of Toronto; J. C. Connell, Dean of the Medical Faculty, Queen's University; H. H. Chown, Dean of the Medical Faculty, Manitoba University; E. P. Lachapelle, Dean of the Medical Faculty, Laval University; F. J. Shepherd, Dean of the Medical Faculty, McGill University, and representatives of the Canadian medical press: Geo. Elliott, *"Dominion Medical Monthly"*; John Ferguson, *"Canada Lancet"*; George O. Hughes, *"Western Canada Medical Journal"*; A. Macphail, *"Canadian Medical Association Journal"*; Harry Morell, *"Western Medical News"*; Adam H. Wright, *Canadian Practitioner and Review"*; W. A. Young, *"Canadian Journal of Medicine and Surgery."*

The Honorary General Secretary is Dr. W. P. Herringham, and any communications in regard to the reading of papers should be addressed to him at the Central Office of the Congress, 13 Hinde St., London W., England.

News Items

Dr. A. C. Estey, M.O.H. of Calgary, Alta., has resigned.

Dr. J. H. Elliott has moved from 611 Spadina Avenue to 11 Spadina Road.

Mr. Carter-Cotton has been elected Chancellor of the British Columbia University.

Dr. Walter McKeown, Toronto, has gone to England and Germany for two months.

Dr. George Badgerow, who has been visiting in Toronto, has returned to London, England.

Dr. Dacre Walker, Andover, Mass., has been visiting Dr. Thos. Walker, St. John, N.B.

Dr. Chas. Hodgetts is acting M.O.H. for Ottawa during Dr. Shirreff's absence recuperating his health.

Sir Hector Cameron, of the University of Glasgow, has been the guest of Mr. Irving H. Cameron, Toronto.

Dr. Harvey Cushing, Baltimore, has officially severed his connection with Johns Hopkins University.

Dr. Thomas H. Quick, Calgary, Alta., was instantly killed in a motor accident on the night of September 30th.

Dr. Frank Scovil, of Brighton, England, has returned from spending a two months' holiday in St. John, N.B.

William Fielding Baines, M.D., died at Hopewell, N.S., August 5th, aged 23 years. He was graduated from Halifax Medical College in 1911.

Dr. R. W. Bruce Smith, Toronto, and Dr. Thos. Walker, St. John, N.B., attended the annual meeting of the American Hospital Association at Detroit.

Up to September 9th there had occurred in Buffalo 220 cases of infantile paralysis, with 26 deaths and permanent crippling in 60 per cent. of the survivors.

Dr. J. W. S. McCullough, Toronto, Secretary of the Ontario Board of Health, has been elected President of the Canadian Public Health Association.

Dr. Percy H. Power died in Vancouver August 28th. He was born in South Africa in 1866, and studied in the University of Dublin, where he graduated in 1887.

Dr. J. D. McKay, Trinity '95, of Marion, Indiana, passed through Toronto recently on his way to London, England, where he will do graduate work in eye, ear, nose and throat.

The following Canadian physicians were recently registered in Paris, France: Dr. T. B. Flint, Ottawa; Drs. J. de Varennes and Arthur Lavoie, Quebec; Drs. J. Kauffmann and Thos. F. Cotton, Montreal.

The President of the University of Toronto invited the Fellows of the Academy of Medicine, Toronto, to attend a reception in honor of the Deutsche Artzliche Studienreise, in Convocation Hall, on Thursday afternoon, October 3rd, at 5 o'clock.

The practice carried on heretofore by Drs. Oldright and Mackenzie, corner Carlton St. and Homewood Ave., Toronto, will be continued at the above address by Dr. Mackenzie. Dr. Oldright will in the future confine himself to practice in consultation.

The work on the Sanitarium at River Glade, N.B., is progressing favorably, and it is expected the building will be finished the latter part of November. Dr. Townsend, the superintendent, has taken up his residence at River Glade and is superintending the work.

Dr. John Jay Taylor, founder and editor of *The Medical Council*, Philadelphia, died at his summer home, Ocean City, N.J., on August 1st, 1912, in his 56th year. *The Medical Council* will be continued under the management of his widow, Mrs. J. J. Taylor, and Dr. Thos. S. Blair as editor.

Dr. Frederick W. Price, Lecturer on Diseases of the Heart at the Medical Graduates' College and Polyclinic, London, England, read a paper on the 8th of October before the Medical Section of the Academy of Medicine, the subject being, "Recent Advances in the Diagnosis, Prognosis and Treatment of Heart Diseases, Illustrated by the Polygraph."

Prof. H. Strauss, of the University of Berlin, will give a lecture, in German, at the New York Post-Graduate Medical School and Hospital, Twentieth Street and Second Avenue, on "Gastric Secretion from the Therapeutic Point of View," on Monday, October 14th, at 4 p.m., and at the same hour on Tuesday, October 15th, a lecture on "The Method and Purpose of Dechlorination in Nephritis." Cards of admission upon application.

Prof. C. von Noorden, of the University of Vienna, will give a series of lectures, in English, at the New York Post-Graduate Medical School and Hospital, on "New Aspects of the Pathology and Treatment of Diabetes," and on "Diagnosis and Treatment of Nephritis," beginning on Tuesday, October 29th, at 4 p.m., and continuing for four consecutive days, at the same hour. Cards of admission upon application.

Publishers Department

We wish again to remind our readers that at any time they desire to sell their medical practices that the Canadian Medical Exchange, 75 Yonge Street, Toronto, in charge of Dr. Hamill, Medical Broker, offers them every facility for so doing, with a maximum of speed and minimum of publicity. His methods are sure to commend themselves to anyone who takes the trouble to investigate, and he would be pleased to send to anybody interested many letters of recommendation from many physicians whose practices he has sold during the last sixteen years. Dr. Hamill informs us that this is about the best time of year to effect a speedy sale.

The Denver Chemical Mfg. Co., manufacturers of Antiphlogistine, are to be congratulated on securing the services of Mr. Harold B. Scott as Manager of the Company, to succeed J. C. Bradley, who is retiring from that position. Mr. Scott is a bright, energetic young man, a graduate of Yale University with the degree of A.B. Upon his graduation from college he entered the commercial world, where he has enjoyed a wide, varied and successful experience in developing one of the great industries of our country. He is peculiarly well fitted for the management of a proprietary house, and his connection with Antiphlogistine will doubtless lead The Denver Chemical Mfg. Co. to spell success with larger letters than ever before.

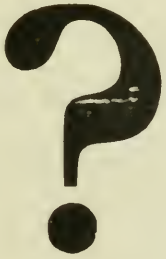
Symptomatic or Complicating Anemia is that form or condition of blood poverty which results from various constitutional infections and diatheses. Prominent among such causes are, Syphilis, Rheumatism, Paludal Poisoning, Tuberculosis, Carcinoma, etc. In many instances, such an anemia is due to some obscure, latent metabolic perversion, or a slow but persistent intestinal autointoxication of gastro-intestinal origin. While it is an axiomatic principle that successful therapy depends upon the removal of the causative factor, it is more than often wise and eminently judicious to adopt direct hematinic treatment while the underlying cause is

being sought for and combated. Pepto-Mangan (Gude) being bland, non-irritant and readily tolerable, can almost always be given, with distinct advantage to appetite, digestion, nutrition and general well-being, while causative therapy is under way. Neither constipation nor digestive disturbance results from its steady use, and a general hematic gain is practically a certainty, if its use is persisted in.

Typhoid Fever.—In a large majority of cases of typhoid fever, there is undoubtedly an intestinal lesion, but other organs are also affected. In a few cases post-mortem examination reveals no lesion whatsoever in the alimentary tract. Typhoid fever differs from some of the infectious diseases in that, during its course, the entire body is exposed to a specific bacillus and that the lesions are, therefore, really several-fold. Many physicians do not admit this fact and speak of and treat enteric fever as if it were an infection to the intestinal canal. In typhoid fever, on the other hand, the patient may be seriously sick with a non-enteric typhoid and yet have an intestine totally free from the typhoid bacilli and from any of the intestinal lesions of the disease. The reports from pathologists show that many cases are now on record in which typhoid fever was present and in which no intestinal lesion was found. If the disease is an infection involving various organs of the economy, the treatment which only has in view the lesions found in the intestinal canal will be inadequate to meet successfully the patient's condition; consequently a close and careful study should be made of any suggestive cause. In the treatment of typhoid fever, the patient should, be in an aseptic, well ventilated light and cheerful room. He should have water at stated intervals. It is a great mistake to neglect this, as when a patient is unconscious he should have water and, of course, does not then ask for it. The medical treatment of enteric fever is largely symptomatic, the patient suffering from the infection produced by the typhoid bacillus. The body is necessarily affected by splenic toxemia; the intestinal glands and other organs are involved. Prominent among the latter symptoms, are emaciation and malnutrition, and this should be combatted by a food which will not overtax the digestive system, and will at the same time supply every element of nutrition. Bovinine is ideally indicated as a food. From the onset, antiseptics are indicated and should be administered more or less throughout the entire course of the disease; but, most of all, keep the patient's temperature down by sponge baths, and the strength and nutrition as near normal as possible.

Essence of Beef, Chicken, Veal or Mutton.—These preparations consist solely of the juice of the finest fresh English or Scotch meat, extracted by a gentle heat, perfectly free from any additional matter whatever—no water or any extraneous matter being used in the process of preparation. There being no preservatives used, it is necessary that, being once opened, they be used up in at least two days, or even less in very hot weather or in a torrid climate. They are best used as a jelly, administered by a teaspoon, and to this end (if the weather or climate has liquified the Essence), should be placed upon ice until the jelly form is reassumed. It can, however, be given as a liquid in conjunction with other fluids, as the doctor might prescribe. Also it is useful spread upon thin bread and butter or dry toast where this form of administration is advised by the doctor. Being so perfectly pure, it can be given in any case where a highly stimulating food is required, and will be readily assimilated by the weakest digestion, and can be administered when the patient is unable to take any other form of nourishment whatever, and even when in a state of coma. Sir Victor Horsley, at the British Medical Congress, held at Toronto in 1906, in an address on Surgery, remarked: "As regards cardiac stimulation, . . . the heart does not require accelerating as a rule, but it requires feeding: undoubtedly repeated enemata (every two hours) of four ounces of beef tea in which is dissolved Brand's Essence of panereatinized milk, is the readiest means of beginning, etc." Its great stimulating properties render it of special value in wasting diseases, and some medical men hold that it is as valuable a stimulant in collapse or heart trouble as alcohol, with the very great advantage that the use of Brand's Essence is not followed by the distressing and troublesome *after depression*, as is only too often the case after the use of alcohol.

Heart Muscle Affections Apart from Valvular Disease.—Dr. G. A. Gibson (*The Lancet*) points out that muscular affections of the heart and certain nervous affections of that organ were practically inseparable. The principal causes of degenerative changes in the heart muscle were microbic; chemical poisons—either extraneous or autochthonous; and the cessation of certain internal glandular secretions. A combination of physical and mental overstrain had also to be seriously considered in the etiology. The symptoms were generally those of cardiac inadequacy. Disorders of rate and rhythm counted for less than changes in the arteries them-



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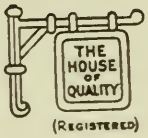
selves and in arterial pressure. He believed the electro-cardiograph was a valuable means of assessing cardiac energy. An estimation of the size of the heart by means of the orthodiagraph was also helpful, but any increase so found must be submitted to a critical examination in each case. In the treatment of chronic myocardial conditions complete rest was the first requisite and was really the best cardiac tonic. This should be carried out in the open air whenever possible. The diet must be such as would not cause dilatation of the hollow viscera, and with this point free elimination was closely associated. In chronic infectious cases the iodides were *facile princeps*, and in combined disturbance of rate, rhythm, and pressure nothing was so useful as digitalis with bromide of potassium, especially in certain tachycardias. In bradycardia they were on more difficult ground, although Dr. Gibson had seen benefit result from a combination of strychnine with belladonna. When, however, this had resulted from degenerative changes in the auriculo-ventricular bundle, nothing was of any use. In the cardiac breakdown attending Graves' disease suprarenal extract was the best available remedy. He referred to the possible benefits attending the use of an extract of heart muscle in such cases, and in conclusion expressed his belief in the Swedish system of exercises as opposed to Schott's method of resistance exercise.

Some Valuable Products for the Treatment of Diseases of Bacterial Origin.—Since the advent of diphtheria antitoxin it is doubtful if any new remedial agent has elicited greater interest than is now being manifested in the bacterial derivatives known as Phylacogens. These products were originated by Dr. A. F. Schafer, of California, the method of preparation and technique of application being first presented to the San Joaquin Medical Society in 'Frisco. To the uninitiated it may be said that the term Phylacogen (pronounced phy-LAC-o-gen) means "phylaxin producer," being derived from two Greek words signifying "a guard" and "to produce." The Phylacogens are sterile aqueous solutions of metabolic substances generated by bacteria grown in artificial media. They are produced from a large variety of pathogenic bacteria, such as the several staphylococci, streptococcus pyogenes, bacillus pyocyaneus, diplococcus pneumoniae, bacillus typhosus, bacillus coli communis, streptococcus rheumaticus, streptococcus erysipelatis, etc. Four Phylacogens are now offered to the medical profession: Mixed Infection Phylacogen (used in the treatment of bacterial



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diseases of unknown etiology), Rheumatism Phylacogen, Erysipelas Phylacogen and Gonorrhea Phylacogen. They have been thoroughly tested clinically and are said to be producing excellent results in the treatment of the various pathological conditions in which they are indicated. They are administered hypodermically—subcutaneously or intravenously—preferably by the former method, the latter being advised only in cases in which a quick result is demanded. They are supplied in hermetically sealed glass vials of 10 c.c. capacity. The Phylacogens are prepared and marketed by Parke, Davis & Co., who have recently issued a 24-page pamphlet which describes them in detail—the process of manufacture, therapeutic indications, dosage, methods of administration—everything, in fact, that needs to be known by the man who desires to use phylacogens. Every physician in general practice, every practitioner who desires to keep abreast of the latest advances in bacterial therapy, should have a copy of this valuable booklet. Write to Parke, Davis & Co., at their offices in Walkerville, Ont., ask for the "Phylacogen pamphlet," and mention this journal.

THE FUNCTIONS OF THE GREAT OMENTUM.—Rubin (*Surgery, Gynecology and Obstetrics*, February, 1911) has contributed a surgical consideration of this subject which he concludes as follows:

The omentum has no spontaneous motility. The displacements of the omentum may be explained by: (a) intestinal peristalsis; (b) intra-abdominal tension; (c) the static condition of the stomach and colon and of the small intestine; (d) the anatomical relationship of the omentum to the gall-bladder and spleen.

The omentum has no demonstrable "chemotaxis." The amount of intraperitoneal fluid plus the amount of gas contained in the large intestine accounts for this apparent intelligent retreat of the omentum from virulent infective processes. In addition the suction action of the diaphragm under changed conditions of intra-abdominal tension explains the apparent upward "chemotaxis" of the omentum in inflammatory lesions of the upper abdomen.

The omentum has no intelligent and spontaneous protective role. Such protection as it apparently displays is simply due to its properties as peritoneum, and not as a superior organ with definite functions.

It cannot restore vitality to necrotic organs, nor vascular supply to those deprived of their circulation. The end product of an adhesion between the omentum and a foreign body is the destruc-

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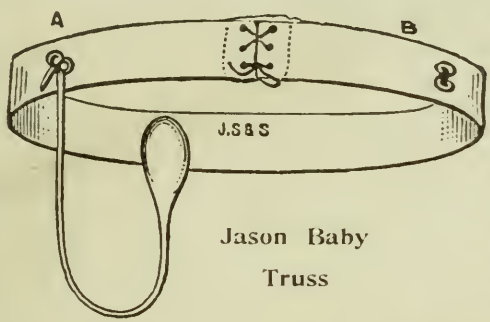

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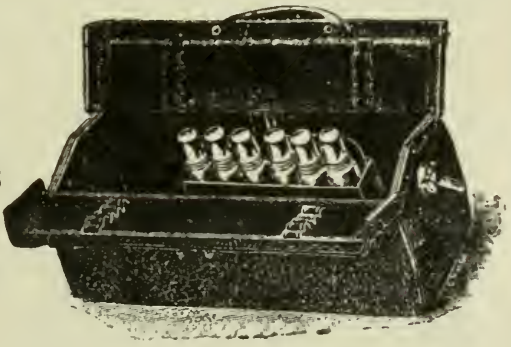

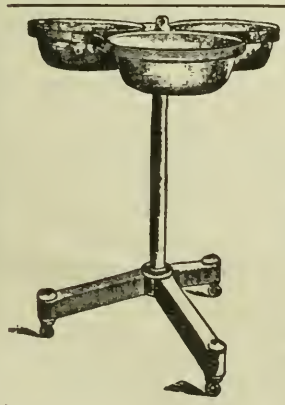

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tion of the foreign body; between the omentum and any other abdominal viscus is scar tissue.

The omentum does not invariably spontaneously repair defects in hollow or solid viscera; it does this imperfectly in man. Experimentally when the rent is not too large the omentum seems to occlude it and prevent leakage from the intestine. In perforated appendicitis, for instance, while the omentum is present in a great number of cases at the seat of the perforation, peritonitis, due to leakage, nevertheless frequently occurs.

The usefulness of the omentum in inflammatory lesions of the abdomen depends upon (a) its power to form adhesions which isolate and render innocuous toxic products; (b) to its power of absorbing and eliminating toxic products or destroying them by virtue of its phagocytic elements. But when contrasted with the sequelæ, intestinal obstruction, pain, etc., its beneficence is overbalanced.

The chief functions of the omentum are those of any other mesentery, namely: (a) the fixation of viscera; (b) vascular supply.

When the omentum is found adherent to an intra-abdominal tumor the probabilities are that the mass is inflammatory, and not neoplastic. If the omentum is adherent to a neoplasm, the tumor invariably has undergone inflammatory changes.

In exploratory gall-bladder operations it is well to remember that an "adhesion" between this viscus and the omentum does not necessarily mean inflammation. The adhesion may be a normal mesentery of the gall-bladder, contributed by the omentum. Care should be exercised, therefore, in the examination of the adhesion before it is unnecessarily separated, and before the gall-bladder is removed.

The best method of preventing adhesions between abdominal incision and omentum consists in the application of a continuous peritoneal catgut suture. Areas of the abdominal cavity uncovered by peritoneum lead almost invariably to adhesion formation.

The omentum is capable of absorbing large quantities of fluid and particles in suspension. Larger particles are attached in a purely mechanical way. The latter is controlled by the action of the diaphragm and intestinal peristalsis.

Too much should not be expected from grafts of the omentum. A detached piece of omentum rapidly becomes necrotic, and is useless. Only intact portions of the omentum produce serviceable adhesions.—*Therapeutic Gazette.*

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SMALLPOX IN MICHIGAN.—During the first three months of 1912 there were reported 283 cases of smallpox in Michigan. The vaccination history of these cases is as follows:

2	cases	vaccinated	"50 or 60 years ago."
3	"	"	"14 years ago."
1	"	"	"years ago."
1	"	"	"at the time of exposure."
1	"	"	"12 years ago."
1	"	"	"infancy and again 10 years ago."
1	"	"	"about 10 years ago."
1	"	"	"some 20 years ago."
1	"	"	"one week after exposure."
10	"	"	"about 3 years ago" (some doubt).
1	"	"	"some years previous."
2	"	"	"in childhood."
2	"	"	"when very young."
1	"	"	"30 years ago."
2	"	"	"6 years ago."
2	"	"	"2 years ago."
1	"	"	"4 years ago."
1	"	"	"5 years ago."
5	"	"	"doubtful if ever."
245	"	"	"NEVER VACCINATED."

Total, 283 cases.

It costs Michigan $150,000 a year to take care of indigent smallpox patients and to protect the unvaccinated.—*Am. Med.*

Dominion Medical Monthly

And Ontario Medical Journal

Vol. XXXIX. TORONTO, DECEMBER, 1912. No. 6

Original Articles

THE WIDENING OF THE SCOPE OF ABDOMINAL SURGERY FROM LIFE-SAVING TO HEALTH-RESTORING OPERATIONS*

By Arthur E. Giles, M.D., B.Sc., F.R.C.S.,

Surgeon to the Chelsea Hospital for Women; Gynecologist to the Prince of Wales' General Hospital, Tottenham.

It is interesting to recall the fact that abdominal surgery is only a little over a hundred years old; because, although various abdominal operations have been performed by heroic surgeons from the earliest times, it was the establishment upon a secure basis of the operation of ovariotomy that secured the proper recognition of abdominal surgery generally. The first successful ovariotomy was one of the triumphs of the New World, for it was performed by Ephraim McDowell, of Kentucky, in the year 1809. Naturally, this historical case did not by itself establish ovariotomy upon a secure basis; on the contrary, for many years there was much opposition and there were few cases. McDowell himself performed the operation only twelve times, with eight recoveries; and for the span of a generation the attitude of the profession was mainly one either of scepticism or of more or less thinly veiled disapproval. The next important advance was made by Charles Clay, of Manchester; his first successful ovariotomy was in 1842, and in all he operated on three hundred and ninety-five patients, with one hundred and one deaths, his mortality being thus about 25 per cent. Think of the courage that must have been required to persevere in the performance and the advocacy of an operation

* Address in Surgery, Canadian Medical Association, Edmonton, August, 1912.

that was attended, at its best, with a mortality of 25 per cent. In 1861, Tyler Smith, speaking from the presidential chair of the Obstetrical Society of London, could utter these pessimistic words, "In the long run, I believe, the results cannot be favorable, either in general or special hospitals." Happily, Tyler Smith's gloomy forecast has not been fulfilled; and by way of illustration and commentary I may mention that at the Chelsea Hospital for Women during the twenty-five years, 1885 to 1910, eight hundred and forty-eight ovariotomies were performed, with forty-seven deaths, giving a mortality of 5.5 per cent.; and if we compare the beginning and the end of this period, we find that in the first five years there were seventy ovariotomies, with nine deaths, or 12.8 per cent.; whilst, in the last five years, there were two hundred and four ovariotomies, with seven deaths, or 3.4 per cent. The results in general hospitals, which at one time were deplorable according to our present standard, are now practically as good as in the special hospitals. Comparing my own cases at the two hospitals with which I am connected, one a general and the other a special hospital, I find at the Prince of Wales' General Hospital, Tottenham, I have had one hundred and forty-eight ovariotomies with five deaths, a mortality of 3.3 per cent.; whilst at the Chelsea Hospital for Women I have had one hundred and six ovariotomies with three deaths, or 2.8 per cent. Naturally, the later results are rather better than the earlier ones; the figures for the last ten years, from July, 1902, to July, 1912, for the two hospitals combined, work out at two hundred and twenty-three cases with five deaths, or 2.2 per cent.

It would take too long to enumerate the successive steps by which the mortality of ovariotomy was progressively lowered; nor can I here pay the tribute of recognition and praise to the brave and brilliant workers who, through good and evil report, persevered in perfecting the operation; it must suffice to recall that the three great factors that revolutionized the results of ovariotomy and laid the foundations of modern abdominal surgery, were, first, the discovery of chloroform anesthesia by Simpson; secondly, the perfection of *technique*, in which Spencer Wells played such a notable part; and thirdly, the introduction, by the genius of Pasteur and Lister, of antisepsis and asepsis.

It is difficult for us to imagine the performance of an abdominal operation without anesthesia; and when thinking of the pre-anesthetic days, probably our first impulse is to thank heaven that we are not called upon to operate under such conditions. It is, therefore, a matter of great interest that we have preserved for us

a record of the impressions of a man who operated both without and with anesthesia. Charles Clay began his work before the discovery of chloroform, and one would have imagined that he would have viewed the introduction of anesthesia with unmixed satisfaction; yet, in 1863, when he had performed one hundred and eight ovariotomies, with seventy-four recoveries, he appeared to be distinctly doubtful of the value of anesthesia; for in a paper entitled "Observations on Ovariotomy," we find this curious passage: "With regard to the use of chloroform, I am not certain if this agent has really added to the success of ovarian operations. The first fourteen of my cases were undertaken before it was discovered, and of these fourteen, nine recovered. But, though I willingly admit the almost impossibility of obtaining the consent of females (at the present time) to submit to so formidable an operation without the aid of this valuable agent, and though I am equally convinced that chloroform is of itself one of the greatest boons to suffering humanity, yet, if it could be accomplished I should infinitely prefer to operate without it, as the patient would bring to bear on her case a nerve and determination to meet so great a trial, which would assist beyond all value the after-treatment; it would also relieve the case from that most distressful retching and vomiting so common after all abdominal operations where it is used to the extent that is required in ovariotomy."

Anesthesia and improvements in *technique* conspicuously lowered the mortality of ovariotomy by lessening two of the great risks; namely, shock and hemorrhage; but even so, the mortality was still very high. In 1878, when Spencer Wells had completed nine hundred cases, there were seventeen deaths in his last one hundred. This was because the greatest danger, that of septicemia, had not been removed, and it was reserved for Lister to defeat this formidable enemy of the surgeon and of mankind. It is through his labors, and those of his disciples all over the civilized world, that we, at the present day, can undertake these serious operations with light hearts; and when I record before you my last ten years' results, with a mortality of a little over 2 per cent., I do so in no spirit of boastfulness or self-aggrandizement; but in doing so I place a wreath of veneration and gratitude on the shrine of the mighty dead.

The admission of ovariotomy to a recognized place in surgery was, of course, not a sudden event that could be assigned to a particular date, or even a particular year. The growth of its recognition was gradual, but we may say that twenty-five years ago this recognition was an accomplished fact. By this time, many sur-

geons, encouraged by the results of ovariotomy, were performing abdominal operations for other conditions. As far back as 1863, Charles Clay performed the first successful hysterectomy for fibroids by the intra-peritoneal method; and in the same year Koeberlé, of Strasbourg, carried out the first hysterectomy by means of the *serre-neud* and the extra-peritoneal treatment of the stump. In 1879, Lawson Tait performed the first operation for the removal of inflamed tubes, and the same year witnessed the performance of Battey's first operation, in which healthy ovaries and tubes were removed for dysmenorrhea. In 1883 Lawson Tait established another record by operating successfully in a case of ruptured tubal pregnancy. But the conservative spirits in the medical profession twenty-five years ago opposed the performance of these operations, although they admitted the justifiability of ovariotomy; just as their predecessors of a generation previously had opposed the performance of ovariotomy; they said that fibroids and inflammatory conditions of the tubes did not endanger life, and that, consequently, it was not justifiable to operate for the relief of these conditions. Their opposition appeared, at the time, to be justified by the high rate of mortality, which then ranged from 20 to 30 per cent., whilst the mortality of ovariotomy had become reduced to from 10 to 15 per cent. But, happily for the race, there were surgeons who had the courage to persevere, believing that the mortality of these operations could be brought down, even as had happened with ovariotomy.

Thus the field of abdominal surgery became further extended; to enumerate only a few instances, we may mention the surgery of the appendix and gall-bladder, intestinal surgery, the operative treatment of gun-shot wounds of the abdomen, and operations for intestinal obstruction. Even the field of obstetrics was encroached upon; for while obstetricians were discussing the relative value of craniotomy and induction of labor in cases of contracted pelvis and other forms of obstructed labor, the advance of abdominal surgery made Cesarean section a safe and satisfactory alternative procedure. At the present time the destruction of a living child, on the ground that there is an obstacle to its birth in Nature's appointed way, is viewed with increasing repugnance; and we may look forward confidently to the time when the performance of craniotomy on a living child will be considered, save in very exceptional circumstances, as a relic of barbarism, stamping its perpetrator as an ignorant bungler.

There is no doubt that, while the mortality of abdominal operations remained high, the scope of abdominal surgery was limited in proportion. It is only desperate cases that admit of desperate remedies, and as long as the risk of operation was greater than the risk of leaving matters alone, it was wise and practical advice to recommend patients to endure their sufferings with Christian resignation rather than face the risks of surgery; and patients would have been justified, when operation was advised, in replying in the words of King David, "Let me fall into the hands of God, rather than into the hands of men."

We now come to the consideration of what has happened in the last twenty-five years, and therewith to the more special subject of these remarks, which is the phenomenal extension of the scope of operations, not for the saving of life alone, but for the relief of suffering.

To illustrate how the field of operations has extended in inverse ratio to the rate of mortality, I cannot give you a more graphic picture than is presented in the records of the Chelsea Hospital for Women. I have investigated the records of all the abdominal operations performed at this hospital during the twenty-five years from 1886 to 1910; and grouping them in periods of five years each, we find the results as follows:—

Years.	No. of Abdominal Operations.	No. of Deaths.	Percentage Mortality.
1886—1890	126	27	21.4
1891—1895	206	35	17.0
1896—1900	879	50	5.6
1901—1905	1,493	63	4.2
1906—1910	1,880	54	2.8

Thus, while fifteen times as many operations were performed in the last five years as compared with the first five years, the percentage mortality was eight times less.

By way of further illustration, I will take two individual classes of operation, one for the removal of the tubes and ovaries for inflammatory disease, and the other, the removal of the uterus for fibroids. I have chosen these two, because, while these operations are performed in a certain proportion of cases for the direct saving of life, their purpose is even more the relief of suffering and of chronic invalidism. The records of the Chelsea Hospital for Women, taken in the same way as before, are as follows:—

Operations for Tubal Disease.

Years.	No of Operations.	No. of Deaths.	Percentage Mortality.
1886—1890	12	4	33.3
1891—1895	22	3	13.6
1896—1900	198	7	3.5
1901—1905	302	10	3.3
1906—1910	363	5	1.3

Hysterectomy for Fibroids of the Uterus.

Years.	No of Operations.	No. of Deaths.	Percentage Mortality.
1886—1890	14	5	35.7
1891—1895	12	5	41.6
1896—1900	150	16	10.6
1901—1905	345	18	5.2
1906—1910	487	9	1.8

These figures show that, for tubal disease, the number of operations was thirty times greater in the last five years, compared with the first five, and the percentage mortality was twenty-six times less. In the case of hysterectomy for fibroids, the number of operations was thirty-five times greater and the mortality twenty times less.

I doubt if the whole range of surgery could show any other two operations that presented such an extension of scope and such a rapidly diminishing mortality within a space of twenty-five years. Surgery has long held an honored place as the saviour of those doomed otherwise to die; the work of the last quarter of a century has given her an equally just and an even wider claim to be regarded as the restorer of those who are otherwise sentenced to what many feel to be worse than death, and that is, chronic invalidism and disablement.

A remarkable feature of this transition has been the corresponding change in the attitude of the general public towards surgical intervention. Formerly, an operation was regarded as a necessarily desperate remedy involving a perilous descent into the valley of the shadow of death; and it was only the power of a Christian faith or a stoical fatalism that enabled them, as Milton was taught by his Heavenly Muse,

"to venture down
The deep descent, and up to re-ascend
Though hard and rare."

The operating theatre presented itself to the popular mind as a chamber of execution, over which hung the sign of the dripping blade, while about it lingered the echoes of the last sighs of departing souls. Now this same theatre has assumed, rather, the character of a temple of healing, with the whilom executioner transfigured into the High Priest. That which was a River of Styx, dark and cold, is now a Pool of Bethesda; and the ill-advised and taciturn Charon has been metamorphosed into the angel that troubles the pool as a signal of healing. (*)

This change in the attitude of the public towards surgical operations is not limited to any one class; we find that the intelligent and highly-educated among our patients have a considerable knowledge of what is involved in various operative procedures, and of the attendant risks and after results; and, because they are well-informed, they exhibit a well-reasoned confidence in submitting to operative treatment. On the other hand, the patients that form the greatest proportion of our hospital cases have but little knowledge of what is implied by operation, beyond the fact that they are sent to sleep and something is done; but their readiness to accept an operation as the proper treatment for them is equally great; all they ask is the assurance that it is for their good and that they will feel nothing; and we find that their confidence is born of their experience of what such treatment has done for their friends.

There is no doubt that implicit confidence on the part of our patients imposes upon us an added burden of responsibility in deciding what advice we are to give them, for, if their confidence is small, they will probably seek and obtain several opinions, and then make their own choice; but if their confidence is great, they will accept our opinion without question and act upon it without demur. But when the stage of advice is passed and that of action is entered upon, this confidence is of the greatest value to us, because the success of our operative work is immeasurably assisted

* It may amuse our readers to see the following version of the above passage in the racy language of Western Canada, taken from the report of the address in the "Edmonton Bulletin." "Dr. Arthur E. Giles whispered to us in a confidential way that a doctor was not honestly represented by the drunken sailor, Charon, who offered to cross us over the river Styx in a topply dug-out for two bits a head, but was really the patronizing barker for the pool of Bethesda, who called out in a mellifluous tone: 'Come on in, the water's fine.'"

by the trustful co-operation of our patients. This is true of those conditions involving questions of life and death, where it is our duty to say, "You must undergo an operation in order that your life may be saved," and it is equally true of those conditions where an operation is a matter of choice rather than of necessity, and where our formula will rather be this, "You will be well-advised to undergo an operation in order that your health may be restored." In my own practice, the distinction that I adopt is, that I *urge* an operation of necessity, and if the patient appears unwilling I use all my powers of persuasion; but I *advise* an operation of election, and after explaining the pros and cons I leave the choice to the patient.

I have dwelt at some length on this question of the attitude of our patients, because it is a most important factor in the consideration of operations for the restoring of health, as distinguished from operations for the saving of life.

Let me now say a few words about some of those conditions, in the department of gynecology, whose treatment by surgical means has been rendered possible by the fall in the death-rate of abdominal operations.

We may begin with uterine displacements. These are conditions that never prove fatal, and therefore we could not advise for their relief any operative treatment that was attended by an appreciable mortality. And so it was only when the mortality of abdominal operations generally was showing a marked decline that the surgical treatment of displacements came into vogue. It is interesting to note that the first abdominal operation for retroversion was an extra-peritoneal one, namely, the Alexander-Adams operation; at that time the peritoneal cavity was still a kind of "*noli me tangere*," and every time it was opened there was a threat of septicemia. Modern asepsis has robbed celiotomy of its terrors; we have learnt the ways of the peritoneal cavity, and ceased to fear it. We now know that if we can leave the vulnerable diaphragmatic area alone, and avoid undue handling of the bowel, and refrain from introducing into the peritoneal cavity irritant chemical antiseptics, the peritoneum is a tolerant structure well capable of looking after its own interests.

It was not long, therefore, before intra-peritoneal operations were introduced for the treatment of displacements, most of them originating on this side of the Atlantic. We had ventrofixation and ventrosuspension of the uterus, with their modifications, and the various procedures for the intra-peritoneal shortening of the round ligaments. It is not necessary in this place to discuss the

merits and demerits of these different operations: the one chiefly practised at the Chelsea Hospital for Women has been what we call hysteropexy, and in the twenty years, from 1891 to 1910, this operation was performed in five hundred and eighty-four cases.

The value of these operations is two-fold: in the first place, many patients are cured who cannot be relieved by other means, for example, cases of adherent retroversion and some cases of prolapse and procidentia. In the second place, patients can be saved from years of pessary treatment. I have before now defined pessaries as a necessary evil, that is, they are necessary sometimes, but evil always; and I have found no reason to alter this definition. It would be possible to draw up a serious indictment of pessaries: the unpleasantness of frequent examinations; the drawback of being chronically under the doctor's hands; the discomforts of irritating discharges and their attendant douchings; the risk of serious ulcerations into the bladder and rectum, of septic infection, and of the development of carcinoma as the result of retained pessaries, examples of which I have seen. If, by means of a safe operation, patients can be saved from all this, and if they desire such relief, surely they are entitled to have it. The radical cure of hernia is considered justifiable, to obviate the discomfort of constantly wearing a truss; why not then the radical cure of a uterine displacement, to obviate the necessity for the more obnoxious pessary. Well, the progress of abdominal surgery has opened up this field of relief to women and it has resulted in a wide relief of suffering and emancipation from disablement.

Passing on to the subject of inflammatory disease of the uterine appendages, we have to do with a somewhat graver condition, because, in a certain proportion of these cases, the patient is seriously ill, and we are called upon to operate in order to save life; and with the remainder, which forms the great majority, it is not a matter merely of obviating discomfort, but it is a question of saving women from prolonged illness, constant suffering, more or less complete invalidism and disablement. Some of these women, in the poorest classes, are the bread-winners, and for them disablement is a worse evil than death.

Now, as long as the operative mortality was high, these patients could not be advised to undergo surgical treatment; and up to twenty years ago the mortality ranged from 20 to 30 per cent. It is true that Lawson Tait as far back as thirty years ago (or, to be precise, in 1883) was able to record sixty-two cases without a death; and his results justified him in taking up a position far in advance of the current medical opinion of his time, and in say-

ing "we could not stop short of dealing with matters that affect life only. Hydro-salpinx was a frequent cause of the most intense suffering, and therefore he would, and did, remove it by surgical operation without hesitation." By degrees, as the figures of the Chelsea Hospital for Women show, the mortality became lower and lower, the figures for five successive quinquennial periods being, 33.3, 13.6, 3.5, 3.3, and 1.3. It was not, however, on the ground of mortality alone that these operations met with opposition in certain professional quarters; it was objected that after these operations, patients remained chronic invalids, that they were unsexed and rendered unfit for wifehood, that they became, at the best, hysterics and at the worst, lunatics. These objections were chiefly theoretical; and two years ago I was able to show, from a detailed investigation of the after-results of these operations, based on two hundred cases in which both ovaries were removed, that 70 per cent. of the patients regained perfect health and vigor and retained their sex-instincts; that the legends of women developing bass voices and growing beards were pure romance; and that there was no more tendency to insanity after double ovariotomy than there was after any other abdominal operation.

Now, what happens to patients suffering from chronic pelvic inflammation who are not treated by surgical means? Here and there we may find a case where symptoms subside and health is more or less completely regained; but this is a rare event. Many of these patients swell the ranks of those who are unjustly described as hysterical and neurotic. How often it has happened to me to have a patient sent up with a letter saying that she exhibited marked neurotic tendencies; and on examination some chronic pelvic disease has been discovered. These cases have constituted in the past a great reproach to the medical profession; such patients often suffer intermittently; they are seldom acutely ill, but they are never completely well; and because there is not much to show for their sufferings, and because, on occasion, they are able to make an effort to appear as other women, they have been treated as neurotics and almost as malingerers; they have been drenched with bromides and valerian; they have been sent from spa to spa and soaked in brine-baths and mud-baths; they have been driven to seek relief in alcohol, morphia, or cocaine; or they have found a doubtful haven among the faith-healers and the Christian Scientists. I contend that we have no right to label any woman as neurotic, unless we can be certain that she has no organic disease; and even then we shall be wiser if we suspend our judgment.

Think of the amount of suffering saved, the workers that have

been restored to the position of earning their livelihood, the relief to the community in the conversion of dependent invalids into sound and useful members of the body corporate; think of all this amount of good done as represented by the eight hundred and forty-one women who have been cured of diseased appendages in the last fifteen years at the Chelsea Hospital for Women. Then add to these the thousands of women similarly cured in other institutions all over the civilized world, and you will gain some idea of the good that has resulted from the decreased mortality of abdominal operations.

We come, thirdly and lastly, to the subject of fibroid tumors of the uterus. Here we have a condition more inherently dangerous than the other two, leading more often to a directly fatal result; and, short of a fatal issue, causing prolonged suffering and disablement. Here, again, we have a condition in which the operative death-rate must exert a marked influence on the advice that we give to our patients. Twenty years ago this operative death-rate was from 20 to 40 per cent.; and it is evident that it was only in cases where a fatal result was threatened that so dangerous an operation could be recommended. In the much larger majority of cases, there was no question of life being at stake, the reason for operation would be only the relief of suffering, and it is seldom that patients yearn for death or are willing to incur a very great risk, merely to be relieved of suffering. It is better, after all, to live as an invalid than to die cured. Now, when a patient with fibroids has to be told that the resources of medicine are exhausted and that the succor of surgery is more cruel than kind, it is a great comfort to be able to hold out some kind of hope, however unsubstantial; and so a fairy tale was built up and decorated to represent a scientific theory, to the effect that the menopause was the natural cure for fibroids. And patients were told, in all seriousness and good faith, "You must wait for the change of life, and then these tumors will shrink and disappear and you will get well." And the patients went on patiently draining their life-blood away, carrying enormous tumors that prevented them from getting about, hoping against hope that the delayed menopause would arrive, like some millennium, to give them peace. Some of them survived the worst troubles and escaped with their lives, a few of them regaining a measure of health, and the remainder remaining more or less permanent invalids. Others found that the menopause, when it came, came not to bless but to curse, bringing in its train degenerative changes, infection, sepsis, and death. Now I do not know what is the state

of current medical opinion in progressive Canada; but I can tell you that in some parts of the Old Country we find a tragic thing, and it is this, that while the operative conditions have revolutionized the death-rate of hysterectomy, causing a drop from 30 to 2 per cent., the hoary myth of the menopause is found to survive, even in high places, and patients are still condemned to years of suffering who might be quickly and safely cured. Look once more at the record of hysterectomies for fibroids at the Chelsea Hospital for Women; observe that in the last five years under consideration four hundred and eighty-seven operations were performed with a mortality in all cases—serious as well as simple—of 1.8 per cent.; and I think that you will agree that I am justified in the contention that all fibroids should be operated upon (unless some weighty reason to the contrary can be shown) in the early stages, as soon as symptoms arise, and without waiting for the development of grave complications; and that, whereas in the early days hysterectomy had to be reserved for cases in which it was required for the saving of life, the progress of abdominal surgery has brought it within the scope of operations that are justifiably performed for the relief of suffering and for the restoration of health.

In bringing these somewhat fragmentary remarks to a close, it may be well to guard against one possible misconception. Let me then state explicitly that the fact that an operation is safe is not, in my opinion, a sufficient reason for operating, if a cure can be obtained by other methods. I have no sympathy with the attitude of mind of Tennyson's imaginary surgical enthusiast, described in the lines—

" indeed, it was said of him
He was happier using the knife than trying to save the limb."

On the contrary, I am not ashamed to admit that I have a feeling of reverence for the human body; and that, in my opinion, the only sanction that can be accorded to surgical interference is that which is derived from the conviction that life, health, or comfort must otherwise be sacrificed. Having made this surgical profession of faith, I feel bound to state my belief that, on the other hand, we are not justified in refusing surgical relief when health and usefulness are at stake, any more than we should be entitled to withhold the aid of surgery when life is threatened—provided always that the ratio of the operative risk to the risk of non-interference be accorded its proper weight and consideration. In other words, while the grave issues of life and death justify

great risks, the lesser issues of health and infirmity warrant only slight risks. It has been my object to show that the development of abdominal surgery and the extension of its scope have enabled us to realize the harmonious adjustment of this ratio, and to place the resources of our surgical art, with ever-lessening risk, at the disposal of an ever-widening circle of humanity.

Malignant Tumors.

Czerny and Caan (*Mün. med. woch.*) record treatment with Mesothorium in the following cases: Carcinoma, 85 cases; sarcoma, 12; lymphosarcoma, 8; endothelioma, 1; angioma, 6; tuberculosis, 6. Of 32 cases of recurrent mammary carcinoma, 19 showed a positive objective and subjective improvement. A favorable result was obtained in four out of six cases of carcinoma of the face treated. Two cases of cancer of the tongue, out of nine treated, were much improved.

Fecal Incontinence.

Newman (*The Proctologist*) reports a case of fecal incontinence treated by the Chetwood operation. This is done as follows: Semilunar incision from one tuber ischii to the other, reaching slightly above the tip of the coccyx. The flap is dissected down, exposing the edge of the gluteus maximus muscle on either side. A ribbon of muscle a quarter of an inch and one-sixteenth of an inch thick is then dissected from the gluteus of each side, having the attachment about the coccyx. The perianal tissue is then tunneled and the strips crossing each other beneath the coccygeal and ligament are brought around the anus. The strips are then attached to the remains of the sphincter and to each other. The skin flap is then sutured back into place. A year and a half after operation this patient is perfectly well and able to control flatus and diarrheic movements.

THERAPEUTIC NOTES

Whooping Cough.

T. W. Dewar (*B. M. J.*) claims to have stopped the cough in ten days by intravenous injections of iodoform.

Pyosalpinx.

H. J. Farbach (*Kentucky Medical Jour.*) does not believe pus in the tube, uterus or ovary an imperative indication for the removal of those structures. He claims to have seen cases illustrating every phase of these pathological conditions, and has yet to see one not relieved or decidedly benefited by vaccine treatment. The relief is not partial but permanent and complete. Autogenous promise better results than stock vaccines.

Pernicious Anemia.

Bramwell (*B.M.J.*) has noticed great improvement from the administration of Salvarsan in pernicious anemia. Of two cases published, over a year afterwards they had remained well without further treatment. He has now treated seven cases with favorable results, and concludes that Salvarsan will be found more efficient than arsenic given by the mouth or any form of treatment for this grave and very intractable disease; and Bramwell, since 1875, has had a large experience with arsenic in this disease.

Burns.

R. P. Stoops (*Therapeutic Gazette*) has used Liquor Cresolis Co. (U.S.P.) in upwards of one hundred cases with uniformly good results as follows:

Bathe affected surface with one per cent. warm solution of liquor cresolis in water until debris is removed and parts are anesthetic. Puncture blebs and express serum. Apply to burns strips of gauze, or in large burns strips of paraffin paper smeared with an abundance of vaseline containing one per cent. of liquor cresolis co. Cover with cotton and bandage. Allow dressing to remain four or five days, after which renew according to indications.

Vaccine Treatment.

Y. Takaki (*Sei-i-kwai Med. Jour.*) treated one hundred cases with vaccines as follows: Staphylococcus aureus, 55; streptococcus pyogenes, 26; bacillus coli, 4; gonococcus, 14; pneumococcus, 1; and got generally favorable results. Certain cases showed speedy, while others showed gradual improvement. No severe reactionary fever was observed in any case, which, in the opinion of Takaki, is due to too large quantity of the vaccine. A small injection, several times repeated, is the best method of administration. The intramuscular method of injection is less painful and does not produce swelling or redness afterwards. Any site for injection may be selected. The staphylococcus aureus vaccine seems to be more effective than the others.

Irreducible Shoulder Presentation.

Ziegelmann (*Rev. Prat. d'Obs. et de Gyn.*) considers that rupture of the uterus must be borne in mind, and that this untoward accident may occur with even the gentlest manipulations. In cases of impacted shoulder presentation, the obstetrician should always be prepared to do a hysterectomy; and if embryotomy is required the head may be left behind. To be satisfied no injury has been done to the walls a thorough investigation should be made of the entire urogenital apparatus.

Arteriosclerosis.

Hochhaus places strong emphasis on removing the cause, or lessening it. Patients should avoid the too strenuous life, and should rest as much as possible, avoiding alcohol, tobacco and coffee, and with these mentioning gout, diabetes and nephritis as possible causes. As these patients are anxious and some even frightened, they should be reassured by suggestion and avoidance of naming their trouble calcification of the arteries on account of the depressing influence it causes and resultant worry. Mild hydrotherapy, Swedish movements and massage cautiously performed, will be found useful. In cases of insufficient heart action, small doses of digitalis may be administered for months or even years, preferably pulverized leaves and quinine sulphate. As a rule, arteriosclerosis does not require treatment except there are actual disturbances.

Leukemia.

G. Kiralyfi (*Weiner Klin Woch.*) reports results in seven cases of leukemia with systematic benzol treatment. It is given in capsules, equal parts of olive oil and benzol, one gramme of the mixture being in each capsule, four capsules a day being taken at first, increasing to two capsules five times a day. A drop from 300,000 to 8,000 leukocytes was observed under the benzol treatment, when nothing, not even the Roentgen ray exposures had produced any effects on their numbers. The course of treatment varied from three weeks to five months, and the age of the patients from 21 to 69 years. Most of the cases were of the myeloid type.

Diabetes.

Anthony Bassler (*N.Y.M.J.*), on "oatmeal days" in diabetes, orders as follows: Oatmeal, eight and one-half ounces, or 250 grammes; butter, eight and one-half ounces; eggs, seven ounces. The oatmeal is cooked thoroughly with water for two hours, and the butter and eggs are stirred in when the oatmeal is nearly done, salt being used as desired. This consists of the food taken on the oatmeal day, and it may be served as thin gruel, mush or fried mush. Black coffee, some of the sour wines, Burgundy, or whiskey may also be taken in moderate quantities, one ounce at luncheon and dinner. If the oatmeal is ground very fine in a coffee grinder it may be mixed with baking powder and very good biscuits can be made, using the butter directly upon them. Some of the oatmeal may be eaten in this way and the rest as mush.

Chronic Constipation in the Aged.

I. L. Nascher (*N. Y. M. J.*) says this condition is frequently aggravated through the improper use of purgatives. The cause of this condition is waste and atony of the muscular fibres, resulting in lessened peristalsis, leading to dilatation of the lower end of the colon and rectum, thus forming an inelastic pouch. Aloin is the most suitable drug, as its action is most powerful in the descending colon and rectum, usually in ten to twelve hours. Belladonna should not be incorporated with the aloin as it inhibits peristalsis and suppresses the secretions. Aloin should not be used where piles are present, but some of the milder peristaltic stimulants as rhubarb, senna, cascara sagrada and ox gall, cascara being probably the best for prolonged use.

Reviews

House-Flies and How They Spread Disease. By C. G. Hewitt, D.Sc., Dominion Entomologist, Ottawa, Canada. Cambridge: The University Press.

Every one can read this little book with the utmost profit. Part I deals with the natural history of the house-fly, its structure, life-history, breeding habits, its parasites and natural enemies. There is also a chapter on other flies found in houses. At the present time, in view of Rosenau's researches in connection with the biting fly and infantile paralysis, this chapter will be interesting. Part II tells of the relation of house-flies to diseases, such as typhoid fever, tuberculosis, summer diarrhea, ophthalmia, cholera, plague, etc. The little book ends with a chapter on prevention and control.

The Practitioner's Encyclopedia of Medicine and Surgery, in all Their Branches. Edited by J. Keogh Murphy, M.C., F.R.C.S., Surgeon, Miller General Hospital for South-east London, Senior Assistant Surgeon to Paddington Green Children's Hospital. 1,443 pages, with illustrations. Price, $8.00, London: Oxford University Press. Toronto: D. T. McAinsh & Co.

This is one of the best books we have examined and read for many a day. It covers the entire medical field and should be in the hands of every medical student and general practitioner. Its striking feature is the compact way it is written, superfluous words and phrases being entirely eliminated. It is essentially practical, modern, up-to-date, being splendidly arranged and set out in the best possible manner. The concise descriptions on treatment are so clear and refreshing that it is a delight to read them. Diagnosis is equally good. That so many writers, all specialists in their departments, should be able to so marshal their material with such completeness, terseness and lucidity as to give to the practitioner a work of such extensive, yet practical scope, should be, indeed, as gratifying to the editor and publishers as it will undoubtedly be to practitioners. It is with great pleasure we heartily commend this really useful and excellent work.

Catechism Series—Operative Surgery, Part I. First edition, with plates. Price, one shilling net. Edinburgh: E. & S. Livingstone.

These books are very handy for medical students, especially in class or private grinds, and just prior to examinations. Indications are given; questions are asked and succinct answers recorded. This part treats of operation upon arteries, operations on joints, veins, bones, vertebral column, thorax, mammary gland, posterior mediastinum, nerves of the extremities. They are very useful helps, practical and concise.

The Blood of the Fathers. A play in four acts. By G. Frank Lydston. Chicago: The Riverton Press.

Dr. G. Frank Lydston is a well-known medical writer upon sociologic questions. This is the story of a young doctor who falls in love, not wisely, but too well. His medical training and knowledge should have taught him better. His wife turns out to be the daughter of a burglar, and, as blood will tell, becomes a thief herself. She does the graceful act and suicides when found out. Dr. Lydston tells his story well, handles the dialogue deftly and sketches the characters with a very good hand. It is a book not written merely for entertainment, but with a purpose. The reading public, however, do not wish for a sermon between the lines, even though it is sugar-coated. Did they, it would serve a good purpose.

The Extraction of Teeth. By J. H. Gibbs, F.R.C.S., L.D.S. (Edin.), Dental Surgeon, Edinburgh Royal Infirmary, etc., etc. Price, 7s. 6d. net. Edinburgh: E. & S. Livingstone.

This is a book of 158 pages of text, beautifully illustrated, and will be of undoubted value to those country practitioners who are remote from dentists and are, therefore, obliged to do a considerable amount of this class of surgery.

The book is issued simply to put upon record the author's methods and technique which he has found eminently successful. Doctors and American and colonial dentists who have attended his clinics in Edinburgh having given expression to the desire to see these methods and technique in print, is the cause of the publication.

Pharmacology and Therapeutics. By Horatio C. Wood, Jr., M.D. J. B. Lippincott Co.

This new work is a most excellent one from the student's standpoint, for the author selects the most useful and important drugs and, treating them under the heading of their physiological actions, he discusses very carefully but directly their functional action and finally their therapeutic value. The "materia medica" of the drug is not so full as to encourage the usual "index" feeling that most of these volumes produce on the practical physician. The publishers have also enhanced the value of this book by most excellent type and paper.

G. W. H.

International Clinics. Volume 3, 1912. Series 22. J. B. Lippincott Co.

This volume of "International Clinics" contains twenty-six different papers, and while some of them might well have been omitted as containing only a recapitulation of ordinary and well known facts, yet the remainder are of more than usual value and well worth reading. The best of these papers are as follows:

Carruthers and Ciesielski describe and give experimental results regarding Sex Determination as taught by the latter, proving that old ova and fresh sperms produce males while new ova and old sperms tend to furnish female descendants.

Linsly Williams on the "Treatment of Chronic Endocarditis" has written a most interesting and valuable paper. His views on digitalis and its value are clearly and satisfactorily laid down.

Solis Cohen has been using the "Double Hydrochlorate of Quinine and Urea in Pneumonia." The characteristic result that he claims is the replacement of a crisis by a lysis, with the avoidance of the danger accompanying the former, and to judge by his death rate, 10 per cent., his treatment is at least worth a trial.

"Spontaneous Gangrene," by Roussel, is interesting from a case which he describes, where multiple gangrene occurred in consequence of an infectious endocarditis.

Lynch discusses the "Difficulties in Diagnosing Duodenal Ulcer from Cecal, Appendiceal and Diseases of the Ileum." This paper tends rather to excuse mistakes in differentiation rather than aids in assisting the practitioner to decide between them.

Arthur Dean Bevan writes one of his usual clever papers on "Tuberculosis of the Genito-Urinary Organs." His descriptions form one of the best articles in the volume, giving as they do his views on removal of the ureter, tuberculin treatment and nephrectomy.

"Epileptic Masks," by Shanahan, of the Craig Colony, is filled with series of interesting cases, and his diagnosis of frequently mistaken diseases is admirable.

Another good paper is that by Carmichael on the "Acute Abdomen" in children, and he recalls to his readers that pneumococcal peritonitis is a common and frequently unthought-of condition.

"Adult Flat Foot," by Stern is probably the most valuable paper in the whole set, with good illustrations and well studied investigations, making the subject most interesting. A disease that is so common as this, with so many complications that make one frequently consider the cause a minor one, should make every physician read and master this article.

Dannreuther writes on the "Recognition and Treatment of Gonorrhea in Women," bringing his experience to bear in discussing the details of endometritis, pus tubes and cellulitis, with clear-cut opinions on the best treatment in every type of case.

Of the remaining papers, several contain some new and interesting methods or remarkable cases, and of these one may mention the following:

Roberts describes four cases of death following open operation for fracture, so that this much vaunted method is not without risk. Van der Veer gives the causes with attached clinical cases of lymphatic edema. Tait McKenzie writes on the unusual subject of the cure of inguinal hernia by exercise; while O'Donnell briefly shows the value of X-rays in diagnosing pelvic deformities and uterine malformations in pregnancy.

The volume is, therefore, full of many interesting and uncommon articles, while Drs. Bevan, Dannreuther, Stern and Williams have contributed the solid material that is particularly excellent.

G. W. H.

Pathology and Treatment of Diseases of Women, fourth edition. By Martin and Jung, translated by Henry Schmitz, M.D., Chicago. Rebman Company, 1123 Broadway, New York.

This comparatively small book of 475 pages contains a very large amount of useful information. It is clearly written, well arranged, and suitably illustrated. The work with which it deals is treated in a practical way, and the close association of the pathological with the clinical aspect cannot fail to lead to a better understanding of various conditions, and to more logical treatment. Brief references to symptomatology and diagnosis are such as to make the book more generally useful and to establish more clearly the close relation of symptoms, pathology and treatment.

F. W. M.

Auto-Intoxication and Disintoxication. An account of a new Fasting Treatment in Diabetes and other Chronic Diseases. By Dr. G. Guelpa (Paris), translated by F. S. Arnold, B.A., M.B., B. Ch. (Oxon.). Price, $1.25. New York: Rebman Company.

This book will serve to enlighten the Canadian medical profession on Dr. Guelpa's methods by starvation and purgation in the relief of disease. There has been an immense amount of interest manifested in France concerning Dr. Guelpa's work, but although in 1910, he read a paper on the subject before the British Medical Association, the medical press and the profession in Great Britain or on this side of the Atlantic paid no very special attention to it. His results are said to be remarkable in diabetes and other chronic diseases, upon which the major part of the book clearly deals. There is also a chapter on the Guelpa treatment in drug addiction and alcoholism, by Dr. Oscar Jennings (Paris). The feature of the treatment may be summed up in the words fasting with purging.

Muscle Spasm and Degenerations in Intrathoracic Inflammations and Light Touch Palpation. By Frances M. Pottenger, Am. M.D., LL.D. St. Louis: C. V. Mosby Co.

This work is largely a collection of published articles which Pottenger has written from time to time. The fact that spasm of certain muscles and later atrophy may be an important diag-

nostic aid in discovering chest conditions, is the main fact that runs through this whole volume. To those who have never realized this fact, the book will open up a most valuable field in their chest work, while to those who recognize these spasms and atrophies the rational and general description will prove most interesting. The chapter on Light Touch Palpation is not new, but again is overlooked, particularly by Canadian practitioners.

I advise the general practitioner to add this to his library; it is also inexpensive. G. W. H.

A Manual of Clinical Chemistry, Microscopy and Bacteriology. By Dr. M. Klopstock and Dr. A. Kowarsky, of Berlin, Germany. Only authorized translation from the last German edition, thoroughly revised and enlarged. Illustrated with forty-three textual figures and sixteen colored plates. Price, $3.00. New York: Rebman Company.

The general practitioner who is so situated that he desires to do his own or the greater part thereof of his chemical, microscopical and bacteriological examinations of sputum, urine, blood, gastric contents, exudates, or even skin examinations, will find in this concise manual one which will fill fully the requirements of his every-day wants. Whilst the book can not be set down as an elaborate and finally complete text-book, it contains the essentials for the practical laboratory worker. In this respect, then, it can be heartily recommended to students as a good text-book, and to practitioners as a splendid working manual.

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Anesthetics: Samuel Johnston.

GEORGE ELLIOTT, MANAGING EDITOR.

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COMMENT FROM MONTH TO MONTH

The common stable fly (*Stomoxys calcitrans*) seems to play an important part in the spread of infantile paralysis.

From thorough epidemiological studies carried on by the Massachusetts Board of Health, under the supervision of its secretary, Dr. Mark W. Richardson, between 1907 and 1912, the investigators were led to strongly suspect this species of out-door fly.

Dr. Milton J. Rosenau, of the Harvard Medical School, who has been working in conjunction with these investigators, announced the results of these investigations and experiments at the recent congress on Hygiene and Demography, in Washington.

Several monkeys were infected with poliomyelitis by intracerebral inoculation. They were then exposed daily to the bites of hundreds of stable flies, and then twelve fresh monkeys to the bites of the same flies. When Rosenau made the announcement six had the symptoms characteristic of infantile paralysis. Of these, two died, three were still paralyzed and one had recovered after a brief illness.

In order to confirm these findings the United States Public Health Service instructed Drs. John F. Anderson and Wade H.

Frost to conduct experiments along the lines of the original investigators. These were begun on October 3rd, and the results are published in the Health Reports of October 25th. They demonstrate conclusively that infantile paralysis may be transmitted to monkeys by the stable fly, and, therefore, confirm the original investigators.

Stomoxys calcitrans, the stable-fly, is described by Hewitt as an out-door fly which sometimes enters and remains inside houses. Fond of the sun, it may be found resting or hovering over doors, gates and fences; wherever there are horses or cattle it is found in abundance. Farm-yards are its natural abiding-places.

Its close similarity to the common house-fly is responsible for the biting habit attributed to the latter, but the house-fly is unable to bite. It is only by aid of the microscope that the difference in the construction of the proboscis of either can be determined. In the stable-fly this is awl-like, adapted for piercing and sucking.

The body is larger, more robust, of brownish green tinge with four dark longitudinal stripes on the dorsal side of the thorax. A striking characteristic is the golden tinge of the anterior end of the median, light-colored stripe.

A blood-sucking insect, it is not attracted by the same means as the house-fly, so does not frequent substances likely to contain intestinal bacilli. Its whole life-history may be completed from twenty-five to thirty-seven days, commonly from July to October.

The hygienic claims of the gas-stove, gas fires, cookers and heaters, these modern innovations of the greatest necessity, comfort, and advantage, must be viewed in their sanitary as well as in their domestic aspects.

In considering the advantages of gas heating, Mr. Vivian B. Lewis, professor of chemistry, Royal Naval College, Greenwich, (see *Medical Officer,* October 19th, 1912), says these have developed within recent years to such a degree as to call for a close and careful investigation into their safeness from a hygienic standpoint.

Nature's way of heating the world is by radiant heat. Solid matter absorbs the sun's rays and then by convection these solids gradually warm the air.

The old-fashioned way of heating a room by the open fire-place is the right way—radiant heat, not convection, whilst the wide chimney was a valuable instrument in ventilation.

Fire-places, however, have had their day, the people desiring cleaner and more modern methods of heating. The principle of radiant heat is preserved through the medium of the burning gas the same as from a coal-fire, while convection heat from these sources has, through modern improvements, been reduced to the minimum. In heating effect, therefore, the gas-stove or grate is far superior to the coal-fire. In modern incandescent burners and gas-fires properly constructed it has been proven they do not vitiate the air, but are valuable in the ventilation of a room. Then they are reliable, free from dust and noise, economic. The humidity of the air, too, is considerably lessened.

The disadvantage of convection heating, as with hot-water pipes, is that the air has to be raised to a high temperature in order to carry the heat over a large area. This makes the air hungry for moisture, and then we have conditions of an unhygienic character.

Supplemental, however, to the gas heating or radiant heating, the hot-water or convection method will give the best results and make for the best hygienic conditions.

By gas heating there is an avoidance to a very great extent of the smoke nuisance in cities and towns, resulting in clearer atmospheres and brighter skies.

Editorial Notes

HAMILTON MEDICAL SOCIETY

The Hamilton Medical Society held its annual banquet in the Royal Hotel on the evening of the 18th of October. There were about 200 present. Dr. W. J. Mayo, Rochester, Minn., was the guest of the evening, and spoke chiefly on the medical schools of the United States.

SASKATCHEWAN MEDICAL ASSOCIATION

The sixth annual meeting of the above Association was held in Moose Jaw, Sept. 3rd to 5th, under the presidency of Dr. Radcliffe. Dr. T. G. Roddick, Montreal, was made an honorary member of the Association. The following officers were elected: President, Dr. Low, Regina; First Vice-President, Dr. Peterson, Saskatoon; Second Vice-President, Dr. R. H. Smith, Moose Jaw; Secretary, Dr. Arthur Wilson. The next meeting will be held in Regina.

POLIOMYELITIS IN VANCOUVER

Cases of Infantile Paralysis have been reported in Vancouver, B.C. It is now a notifiable disease, and physicians are required to give as much information as possible when reporting cases to the medical officer of health, Dr. Underhill. This information takes cognizance of local conditions and previous history. Patients and those attending them are isolated for three weeks from the time of onset, and children of families in which cases occur are not allowed to attend school or mingle with other children.

BRITISH COLUMBIA MEDICAL ASSOCIATION

The thirteenth annual meeting of this Association was held in Victoria, on the 20th and 21st of August. The programme was an excellent one, many good papers being presented and the discussions keen and to the point. Dr. A. S. Munro, Vancouver, was elected President; Vice-President, Dr. Herman Robertson, Victoria; Treasurer, Dr. P. A. McLennan, Vancouver; Secretary, Dr.

J. N. McIntosh, Vancouver; Executive Committee, Dr. H. E. Ridgewood, H. W. Riggs and G. H. Manchester. The next meeting, in 1913, will be held in Vancouver.

ABSENT TREATMENT UP TO DATE

"Dear Sir," wrote a man to a specialist in Germany, "I have had a bullet in my thorax eleven years. Being too busy to go to Berlin, I hope you will come to me with your rays, as my case might be worth your while. If you cannot come, please send a packet of rays with instructions how to use same, etc. Perhaps I can use them on myself." To this the specialist is said to have replied: "Sorry, my engagements prevent my going to you, and I am out of rays at the present time. If you cannot come to me, yourself, send your thorax by express, and I will do the best I can with it."

WAITING FOR FUN

The story is going the rounds of some exchanges of a farmer who took a week's recreation in the city, and became greatly enamored of a melodrama. He went to the same play four consecutive evenings. On the fourth, the manager gave expression to his approval of his efforts, but advised him to go somewhere else and see something different. "Not on your life," responded the visitor. "You know the end of the second act where Don Juan Montague jumps out of the window just before the unexpected return of the husband. Well, some night that cuss is going to be caught, and I want to be there to see the fun."

TESTING THE FUNCTION OF THE PANCREAS

In *The American Journal of Gastro-Enterology* for October, 1912, an abstract of Ehrmann's paper published in July 15th, 1912, number of *Berliner Klinische Wochenschrift*, sets forth the technique of this test as follows: On a fasting stomach the patient is given 30 grains of rice flour dissolved in a cup of warm water, to which is added 75 grains of liquid palmitin. This test meal is extracted within two and one-half hours. It is then thoroughly mixed and well shaken with petroleum ether containing 10 per

cent. benzol. The ethereal extract is then mixed with a 3 per cent. solution of copper acetate in distilled water. An emerald green color in the ethereal layer indicates pancreatic activity. If no color change results, pancreatic lipase is absent. Hydrochloric acid in the gastric contents may interfere with the test. It is, therefore, advisable to add soda to a second test meal to overcome the acidity. It may be said that the reaction is based upon the fact that neutral fat, free from fatty acid, is split up by the lipase from the pancreas, the resulting acid forming green salts with copper.

MEDICAL RESEARCH AT UNIVERSITY OF TORONTO

Through the enterprise and progressiveness of Professor McPhedran, twenty to fifty thousand dollars has been secured to prosecute research work in the Medical Department of the University of Toronto. The Board of Governors of the University have appointed President Falconer, Dean Clarke, Professor McPhedran, Professor Leathes, Professor Brodie and Professor J. J. Mackenzie to direct the research work. A portion of the fund will be directed towards tuberculosis.

"SYNTHETIC MILK"

This new food product of German scientific origin early found its way into England and *The Lancet* soon had an opportunity of examining into its claims. Their consulting chemist says the substance looks very like milk and has a round, sweet, fatty flavor not unlike that of rich milk. It is said to be an ingenious uniform emulsion, its constituents being mostly derived from the soya bean and other vegetables. As the product can be retailed at 3d. a quart, it may in time prove an undoubted rival of the genuine article.

SHALL DOCTORS ADVERTISE?

Dr. Holder Sneve, the retiring President of the Minnesota State Medical Association, gave expression to the following in his retiring presidential address. "I am a believer in newspaper publicity as regards new methods, accomplishments and successes. I believe in doctors advertising to an extent that will justify the newspapers in excluding patent medicine advertisements, which

we know are injurious. But, most of all, I think the people should be in closer touch with the work of physicians and surgeons than they are now. The medical profession is advancing rapidly. The *Medical Standard*, commenting upon these statements, believes that the time has come when the physician has the right to let it be known what the profession is doing to save lives, and what he personally can do for the relief of disease.

COLLECTING ACCOUNTS

Los Angeles, Cal., medical men claim to have solved the difficulty of collecting from delinquent patients. They have stickers printed in red ink, 3 x 1¼ inches in size. A brief and courteous statement calling attention to the overdue account is printed on these stickers. Each month one of these stickers is attached to the bill, until the debtor comes over with the money. This plan was adopted by the L. A. County Society, and their collector soon complained he had no business.

VENTILATION OF SLEEPING CARS

Before the recent Congress of Hygiene and Demography, in Washington, Dr. T. R. Crowther amplified his previous studies in relation to the ventilation of sleeping cars. His studies and experiments warrant the following conclusions:

The ordinary defects of ventilation lie with the physical function of the air and not with the chemical, the good effects of efficient ventilation depending on the coolness, the relative humidity, the motion of the air, and the ceaseless variation of these qualities; normal respired air contains no volatile poison and is not capable of harming the human organism when rebreathed under ordinary conditions of ventilation; the increase of carbon dioxide and the decrease of oxygen have nothing to do with the ventilation problem under normal conditions, or with the subjective or objective effects of close air. Cold air entering in small convection currents, fulfil the desired conditions of ventilation, and cars ventilated according to this method are found to be effectively ventilated from the standpoint of air comfort and the feeling of bodily well-being. Comfort and air purity have little or no relation, but comfort and air temperature and motion are very closely related. When we speak of good or bad air, according to our sensations, we speak in a physical and not in a chemical sense.

CHILD WELFARE EXHIBITION, MONTREAL

Montreal had a very successful Child Welfare Exhibition during the two weeks ending the 22nd of October. The success of its promotion was largely due to Dr. J. George Adami. One of the exhibits which attracted marked attention, especially from mothers, was the screen upon which an electric light flashed every ten seconds, showing that somewhere in the world a baby was paying with its life, the price of ignorance. This sums up to 3,053,000 infant deaths in the world in a year. To this sum total, Montreal alone contributed 5,355 deaths in 1911. Of this number, 2,332 died from diarrheal disturbances, 611 from lung diseases, 303 from contagious diseases.

NEW DOMINION MEDICAL COUNCIL

The first meeting to organize the new Dominion Medical Council has been summoned by Hon. Dr. Roche, Secretary of State. The summons, which is issued under the Canada Medical Health Act, called for a gathering of delegates at Ottawa, on the morning of Thursday, Nov. 7. The meeting is to comprise representatives of the several Provincial medical councils, representatives of the universities, representatives of the homeopathic physicians, and three members yet to be appointed by Order-in-Council. The delegates from the Provincial Councils are:—Ontario—Dr. W. Spankie, Wolfe Island; Dr. R. J. Gibson, Sault Ste. Marie. Quebec—Dr. L. P. Norman, Three Rivers; Dr. Arthur Simard, 59 Rue d'Antenial, Quebec. New Brunswick—Dr. A. B. Atherton, Fredericton; Dr. Walter W. White, St. John. Nova Scotia—Dr. A. W. H. Lindsay, Halifax; Dr. John Stewart, Halifax. Manitoba—Dr. R. S. Thornton, Deloraine; Dr. J. S. Gray, Winnipeg. Alberta—Dr. R. G. Brett, Banff; Dr. John Park, Edmonton. British Columbia—Dr. R. E. McKechnie, Vancouver; Dr. R. E. Walker, New Westminster. Those of Prince Edward Island and Saskatchewan have not yet been selected. The representatives of the universities are:—Dalhousie—Dr. D. Fraser Harris, Halifax. Manitoba—Dr. J. R. Jones, Winnipeg. Queen's—Dr. J. C. Connell, Kingston. Western—Dr. H. A. McCallum, London. Laval, Montreal—Dr. E. P. Lachapelle, Montreal. Laval, Quebec—Dr. D. Brocher, Quebec. McGill—Dr. F. J. Shepherd, Montreal. Toronto—Dr. J. M. McCallum, Toronto. The representatives of the homeopathic body are:—Manitoba—Dr. Charles E. Sugden, Winnipeg. Ontario—Dr. E. A. P. Hardy, Toronto. Quebec—Dr. E. M. Morgan, Montreal.

News Items

Dr. Geo. Ryan has returned from Dorchester, N.B., to Paris, France.

Dr. W. J. Roe, Georgetown, Ont., is dead at the age of 75 years.

Dr. A. B. Atherton, Fredericton, N.B., has gone on a trip to California.

Dr. Jessie A. MacBean, of South China, is spending a holiday in Montreal.

Dr. R. Heber Burritt, Amherst, N.B., has left to practice in Saskatoon.

Dr. R. J. Moffat, Lethbridge, Alta., has been visiting in Andover. N.B.

Dr. Gordon S. Mundie has returned to Montreal, after spending two years abroad.

The National Sanitarium Association will establish a dispensary on College Street, Toronto.

Dr. Alexis Carrel of the Rockefeller Institute, New York, has been awarded the Nobel prize for Medicine.

Dr. J. T. Duncan, a leading eye specialist of Toronto, died suddenly in California, whither he had gone in search of health.

Dr. Maurice E. Peters, Brookline, Mass., and Dr. LeBaun H. Peters, Bridgeport, Conn., have been paying a visit to St. John, N.B.

The Winnipeg Medico-Chirurgical Society and the Winnipeg Clinical Society have been amalgamated into the Winnipeg Medical Society.

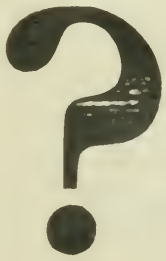
Dr. Arbuthnot Lane, London, Eng., delivered an address before the Academy of Medicine, Toronto, on the evening of the 5th of November.

The new Council of Saskatchewan is composed of Dr. Miller, Battleford; Dr. Young, Saskatoon; Dr. Irvine, Yorkton; Dr. Argue, Grenfell; Dr. Eaglesham, Weyburn; Dr. Thomson, Regina; Dr. McCulloch, Moosejaw.

The Manitoba Medical Council has elected the following officers: President, Dr. McCharles, Manitou; Vice-president, Dr. Pope, Winnipeg; Treasurer, Dr. Gardiner, Winnipeg; Registrar, Dr. J. S. Gray, Winnipeg.

The Dominion Medical Council elected the following officers: President, Dr. Roddick, Montreal; Vice-President, Dr. Thornton, Deloraine, Man.; Registrar, Dr. R. W. Powell, Ottawa; Executive Committee, Drs. McKechnie of Victoria, Hardy of Toronto, Stewart of Halifax, Brett of Banff, Spankie of Wolfe Island, and Normand of Montreal. Doctors from all over Canada were present, and were in session for two days.

Mr. Arthur C. Hendrick, M.A., M.B., of the staffs of the University of Toronto, and the Toronto General Hospital, has passed with distinction the examination for the degree of Fellow of the Royal College of Surgeons of Edinburgh, and has been duly admitted a Fellow of the College. Dr. Hendrick was a Blake Scholar at matriculation, and graduated with first-class honors in both Arts and Medicine, and also holds the post-graduate degree of M.A., of the University.



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The Canadian Medical Exchange, for the purchase and sale of medical practices, 75 Yonge Street, corner of King, conducted by Dr. W. E. Hamill, medical broker, advises us that no time during the past 15 years has he had such a choice list of practices and openings to present to prospective purchasers as at the present time, and he feels assured that any physician desiring a practice can secure a short cut thereto by making his wants known to him, when full information free will be furnished. Full particulars both to vendors and vendees will be given upon application.

What is Best in Tonics?—Many people, and perhaps a few physicians, are inclined to consider the terms "tonic" and "stimulant" as more or less synonymous and interchangeable. This, of course, is not the case, although some agents employed medicinally may partake of the properties of both and be properly known as "tono-stimulants." Strichnia, for instance, is a heart stimulant, but may also be considered as a general nerve and systemic tonic when given in small and frequently repeated doses. While a stimulant alone is sometimes indicated in conditions of emergency, its long continuance almost certainly produces an after depression. It is sometimes advisable, however, to give stimulant and tonic together in conditions of serious general depression, the first to " boost " the vitality and the second to hold it at the point to which it has been raised and to restore the general tone of the organism. An ideal combination of this nature is Pepto-Mangan (Gude) to which has been added the proper dose of strychnia, according to indications. This combination is especially serviceable in the convalescence of exhausting diseases such as Typhoid Fever, Pneumonia, La Grippe, etc. It is also of much value when the heart needs support and the general system requires upbuilding. Pepto-Mangan restores vitality to the blood by increasing the number of red cells and the percentage of hemoglobin, and the strychnia assists in rendering the combination a peculiarly efficient general bracer and permanent reconstituent.

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"Dichotomy."—Probably many of our readers are unaware of the meaning of the term at the head of this note, for the practice itself has not, we are glad to think, yet become naturalised in these countries. The term is applied, we are informed, to the custom, which is gaining foothold in America, of consultants or specialists giving to the introducing practitioner a commission, or a share of the fee. We knew that some such corruption was practised among the more disreputable both of general practitioners and of specialists, and this, perhaps, was no matter for wonder when one remembered to what an extent business methods govern medical practice in America. The evil, however, seems to be spreading, and to have infected even the better circles of the profession. For instance, the New York Academy of Medicine, a body of very select membership, has found it necessary to condemn the practice of division of fees, and to warn its members that any evidence of their participation therein will lead to expulsion. From this it would appear that some men of high professional standing have been found to countenance a very scandalous custom. We are glad to think that in these countries, at present at any rate, such things are impossible. Apart

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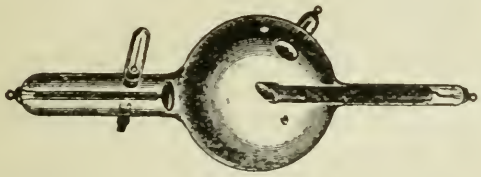

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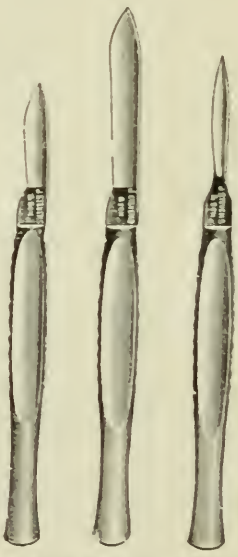

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altogether from considerations of honor and propriety, it is well to remember that public confidence is the breath of the nostrils to a professional man. Nothing is more likely to destroy such confidence than any suspicion that the advice given is governed by considerations of pecuniary profit.—*Medical Press and Circular.*

A Campaign Against Beats.—The National Association of Credit Men, at the meeting of its officers in Rochester, decided to raise a million dollars, at the rate of a hundred thousand a year, for the purpose of prosecuting dead beats. The expense amounts to only about $7, for each firm represented in the membership. This is a movement with which the medical profession will sympathize. Perhaps it will even be worth while and practicable to coöperate in some way. At any rate, the whole country will gain by it. The tax which the dead beat places on the citizen is greater than that imposed by all branches of government—at least for the average professional and business man. It is greater than the loss from honest thieves, robbers and burglars who, at least, do something to earn a living and do not sneak behind the protection of the law. And, in the long run, the dead beat himself loses more than his victim. In fact, the greatest kindness to any young man who finds it easy to borrow or to obtain credit and hard to pay, is to bring him up short and teach him that it pays to be honest.—*Buffalo Medical Journal.*

The Storm Binder and Abdominal Supporter.—The problem of securing a proper and efficient abdominal support during pregnancy and after confinement as well as after laparotomies is an important one, and has in recent years been extended considerably, since the importance of relieving all varieties of enteroptosis by mechanical support has been realized. The treatment of enteroptosis, of floating kidney, and even of chololithiasis (according to Achilles Rose), by a well-fitting abdominal support has been successful in a large number of cases. It is, however, indispensable that the support should not only be properly adjusted and should hold the prolapsed viscera in place, but it must also be free from discomfort, it must be washable, durable in quality and moderate in price. All these requirements are unusually well met in the Binder and Abdominal Supporter made in many varieties and for all conceivable purposes by Katherine L. Storm, M.D., 1612 Diamond Street, Philadelphia, Pa., who has made a remarkably successful study of

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Words of Appreciation.—The following letter, relating to the treatment of opium and other addictions, will interest many. It is addressed to our old friend, The Antikamnia Chemical Company, and reads: "Gentlemen,—Illness, dating from the very day of my former letter, must be my plea for my silence and my seeming indifference to your courtesy and your exceptional kindness in sending me your little 'Vest-Pocket Box.' I want you to feel that I sincerely appreciate your goodness in this little matter. I am in charge of The Woolley Sanatorium, Atlanta, Ga., an institution conducted exclusively for the cure of opium and other drug addictions, and am using Antikamnia Tablets extensively after withdrawing morphia, and I am free to say that I do, in reality, regard your product as 'A Succedaneum for Morphia.' Our Institution is probably the largest of its kind in the South, and if my views should prove of value to you at any time, command me." —Marion T. Davis, M.D.

Mrs. MacKinnon's Massage Institution, 20 Walmer Road, Toronto. Telephone, College 7895. Mrs. Neil MacKinnon, for many years a specialist in all branches of massage, having received her training in the Old Country, has within the past few months opened an institution in this city at the above address. All forms of massage, including electrical, electric light, and needle spray baths, are administered in this institution under her personal supervision. The location of her institution is one of the best that could be desired, and there is a beautiful conservatory, with a southern exposure. There is a masseur in attendance for male patients. The rooms are large and sunny, the appointments being especially tasty and well adapted for carrying on such work. Physicians are invited to visit and inspect for themselves.

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